STACEY DAWN SCOTT, B.Sc., Ph.D.

Interim Dean, College of Computational, Mathematical, and Physical Sciences
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Gender: Female

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1 SUMMARY OF LEADERSHIP AND ACADEMIC ADMINISTRATION WORK

I bring 18 years of experience as an accomplished researcher, dedicated educator, and collaborative academic leader at two leading Canadian universities. As Interim Dean of the newly established College of Computational, Mathematical, and Physical Sciences at Guelph, I have demonstrated strong administrative leadership, exceptional communication, and a commitment to science and technology education and research. My career reflects a sustained record of impactful scholarship, community-building, and strategic leadership in interdisciplinary academic environments. The following section highlights key achievements and service contributions that illustrate my readiness to serve as the next Dean.

Administrative Leadership & Experience

July 2025-	**Interim Dean, College of Computational, Mathematical, and Physical Sciences**, UofG. *Managing daily College affairs. Providing strategic and collaborative leadership for College faculty, staff, and students. Collaborating with Provost and University Leadership Team on strategies for continual improvement and relevance of College and UofG to local, national, and international community.*
March-June 2025	**Chair, Ad Hoc Cmte on College Restructuring, representing Computer Science, Mathematics & Statistics, Physics, Chemistry**, UofG. *Led faculty, staff, and student consultations around restructuring College of Engineering and Physical Sciences into two separate Colleges. Liaised with University administration. Co-prepared Senate proposal for restructuring with Engineering.*
2023-2025	**Associate Director, Graduate Studies** SoCS, UofG. *Chaired graduate admissions, program, and progress committees. Managed daily graduate operations, advised grad students, managed staff.*
2023-2024	**Interim Director, Master of Cybersecurity and Threat Intelligence Course-Based Master's Program**, UofG. *Led admissions and program cmtes. Led program operations, managed staff.*
2020-2021	**Assistant Director,** SoCS, UofG. *Served on School's Leadership Team, assisted with School operations, Chaired Outreach Committee (also covered vacant recruitment staff position). Chaired Awards Committee. Assisted with Cyclical Program Review.*
2018-2020	**Chair,** Strategic Planning Cmte, SoCS, UofG. *Led School's strategic planning process. Conducted faculty and staff consultation meetings and retreats, conducted survey, analyzed collected data with committee, drafted Strategic Plan, and coordinated with new Director for input and plan finalization.*
2009-2010, 2019-2020, 2023-2025	**Member**, Faculty Search (Hiring) Cmte (numerous positions), UofG & UWaterloo. *Participated in end-to-end search process for 10+ faculty at UofG and at UWaterloo in various research areas including AI, Computer Vision, Control Systems, Computational Modeling, and a SHARCnet Chair.*
2010, 2013, 2018	**Member**, Systems Design Eng. Dept. Chair (Internal) Selection and Reappointment Cmtes, UWaterloo. **Member**, SoCS School Director (External) Search Cmte, UofG. *Gathered faculty and staff input. Solicited internal candidates/screened external applicants, conducted interviews.*
2017-2019	**Member**, SoCS Tenure & Promotion Cmte, SoCS, UofG. *Conducted biennial performance reviews for tenured faculty and annual reviews for pre-tenure faculty. Reviewed Tenure & Promotion applications. Assisted with major redesign of School's T&P Guidelines.*

Research Leadership

2007-now	**Director**, Collaborative Systems Laboratory, UofG and UWaterloo. *Managed research team (100+ URAs, Masters, PhDs, PDFs, RA staff over past 18 years), raised/co-raised over $11.2M in research funding, collaborated with academic and industry partners, published over 120 scientific articles.*
2012-2018	**Co-founder, Theme Co-leader,** SSHRC Research Network: Interactive & Multi-Modal Experience Research Syndicate (IMMERSe), UWaterloo. *Network involved 35 researchers across 10 institutions*
2011-2015	**Co-founder, Associate Director,** Games Institute, UWaterloo. *Cross-Faculty research institute involves 40+ faculty researchers across 15+ UWaterloo departments and affiliated schools.*
2010-2016	**Co-founder, Theme Co-leader,** NSERC Strategic Network, Digital Surface Software Application Network (SurfNet), UWaterloo. *Network involved 32 researchers across 17 institutions.*
2010-2013	**Co-founder, Canadian Director,** LEIF Canada-EU Exchange Program, UWaterloo. *Program supported research exchanges between 4 Canadian and 4 European universities.*

2 PERSONAL DATA

2.1 ACADEMIC EXPERIENCE

University of Guelph, Guelph, ON

Interim Dean, College of Computational, Mathematical, and Physical Sciences	2025-
Associate Director, Graduate Studies, School of Computer Science	2023-2025
Interim Director, Master of Cybersecurity & Threat Intelligence Program, Sch. Computer Science	2023-2024
Professor with Tenure, School of Computer Science	2021-
Assistant Director, School of Computer Science	2020-2021
Associate Professor with Tenure, School of Computer Science	2016-2021
Founder & Director, Collaborative Systems Laboratory (Emerging Technology Research Lab)	2016-

University of Waterloo, Waterloo, ON

Adjunct Professor, Cheriton School of Computer Science	2018-
Adjunct Professor, Department of Systems Design Engineering	2016-2023
Associate Professor with Tenure, Department of Systems Design Engineering	2015-2016
Assistant Professor, Department of Systems Design Engineering	2007-2015
Cross Appointment, Department of English Language and Literature, Faculty of Arts	2011-2016
Member, The Games Institute (Cross-Faculty Research Institute)	2011-
Co-Founder & Inaugural Assoc. Director, The Games Institute (Cross-Faculty Research Institute)	2011-2015
Founder & Director, Collaborative System Laboratory (Emerging Technology Research Lab)	2007-2022

2.2 LEAVES

Sabbatical Leave (8 months)	2021-2022
Sabbatical Leave (6 months)	2015
Parental Leave (6 months)	2012
Medical Leave (8 months)	2010-2011

2.3 EDUCATION

Massachusetts Institute of Technology (MIT), Cambridge, MA, USA   2005-2007
Postdoctoral Associate, Dept. of Aeronautics and Astronautics (School of Engineering)

University of Calgary, Calgary, AB   2002-2005
Ph.D. in Computer Science, Dissertation: *Territoriality in Collaborative Tabletop Workspaces*
    John Kendall Award for Best Doctoral Thesis, Faculty of Science

Dalhousie University, Halifax, NS   2001-2002
Visiting Scholar for 10 months

Simon Fraser University, Burnaby, BC   1998-2002
Pursued Ph.D. degree in Computer Science (transferred to UCalgary, Sept. 2002)

Dalhousie University, Halifax, NS   1992-1996
Joint B.Sc. with Honours Co-op in Mathematics and Computer Science

2.4   SELECTED AWARDS & HONOURS

2025 Editor's Choice Selection for "Application of Multidimensional Soil Data Harmonization to Develop the Ontario Soil Information System (OSIS)" *Canadian Journal of Soil Science*	2025
Undergraduate Student Supervision Award *College of Engineering and Physical Sciences, University of Guelph*	2022
Best Paper Award for "Exploring the Effects of Precision Livestock Farming Notification Mechanisms on Canadian Dairy Farmers" *EAI International Conference on Interactive Digital Media (ICIDM) 2021*	2021
Lasting Impact Award for "Territoriality in Collaborative Tabletop Workspaces" *ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW) 2020*	2020
Best Paper Honorable Mention (awarded to <5% of submissions) for "Post-meeting Curation of Whiteboard Content Captured with Mobile Devices" *ACM International Conference of Interactive Surfaces and Spaces (ISS) 2018*	2018
NSERC Discovery Accelerator Supplement Award, *NSERC ($120,000 over 3 years)*	2017-2020
Student Game Design Competition Award AND Student Game Design Competition -- People's Choice Award for " 'Beam Me 'Round, Scotty!': Studying Asymmetry and Interdependence in a Prototype Cooperative Game" *ACM Annual Symposium on Computer-Human Interaction in Play (CHI PLAY) 2015*	2015
Best Paper Honorable Mention (awarded to <5% of submissions) for "A Laboratory-based Study Methodology to Investigate Attraction Power of Large Public Interactive Displays" *ACM Conference on Ubiquitous and Pervasive Computing (UBICOMP) 2015*	2015
Best Poster Award for "How to Measure Social Presence: The Role of Speech Patterns", *Graphics Interface Conference 2015*	2015
Outstanding Paper Runner Up for "Cross-Device Transfer in a Collaborative Multi-Surface Environment without User Identification" *International Conference on Collaboration Technologies and Systems (CTS) 2014*	2014
Best Paper Honorable Mention (awarded to <5% of 2000 submissions) for "Canyon: Providing Location Awareness of Multiple Moving Objects in a Detail View on Large Displays" *ACM Conference on Human Factors in Computing Systems (CHI) 2013*	2013
Best Emerging Technology Demo Award for "CRISTAL, Control of Remotely Interfaced Systems using Touch-based Actions in Living Spaces (E-Tech Demonstration)" *ACM International Conference and Exhibition on Computer Graphics and Interactive Technologies (SIGGRAPH) 2009.*	2009
NSERC University Faculty Award, *NSERC ($200,000 over 5 years)*	2007-2012
Postdoctoral Fellowship, *NSERC ($40,000 for 2 years, declined due to US Visa restrictions*	2005-2007
John Kendall Award for Best Doctoral Thesis, *Faculty of Science, University of Calgary*	2005

2.5 INDUSTRY CONSULTING AND PROFESSIONAL EXPERIENCE

Public Health Canada, Guelph, ON

Research Consultant: Information visualization consultation, and student supervision, on the project "Visualizing Factors Contributing to Antimicrobial Resistance", through the University of Waterloo, funded by Public Health Canada.

2017

Menya Solutions, Sherbrooke, QC

Research Consultant: Collaborative technology and interface design and analysis consultation on the project "Naval Battle Management C2 Decision and Collaboration Support", funded by Defence Research and Development Canada (DRDC)-Valcartier.

2014-2015

Electronic Arts, Kitchener, ON

Research Consultant: Experimental design consultation, and student supervision, on the project "Experimental Design and User Study of EA Gaming Concepts", through the University of Waterloo, funded by Electronic Arts Canada.

2014

Centre en Imagerie Numérique et Médias Interactifs (CIMMI), Québec, QC

Research Consultant: Collaborative technology design and analysis consultation on the project "Automatic User Identification for Surface Computing using Microsoft Kinect Sensors", funded by Defence Research and Development Canada (DRDC)-Atlantic.

2011-2012

Defence Research and Development Canada (DRDC)-Atlantic, Halifax, NS

Research Consultant: Information visualization and software design consultation, and student supervision, on the project "Investigation of a Prototype Naval Planning Tool for Tabletop Research", through the University of Waterloo, funded by DRDC-Atlantic.

2009

CMC Electronics, Kanata, ON

Research Consultant: Human factors study design and analysis consultation on the project "Virtual Social Networking", through the University of Waterloo, funded by Defence Research and Development Canada (DRDC)-Atlantic.

2009-2011

Research Consultant: Human factors study design and analysis consultation on the project "Collaborative Workspace Requirements for Tactical Picture Compilation on a Naval Task Group", through the University of Waterloo, funded by Defence Research and Development Canada (DRDC)-Atlantic.

2008

Research Consultant: Collaborative technology design and analysis consultation on the project "Experimental Platform for Distributed Teams", through the University of Waterloo, funded by Defence Research and Development Canada (DRDC)-Toronto.

2007-2008

Mitsubishi Electric Research Laboratories, Cambridge, MA, USA

Research Intern: Conducted formal user study of human-in-the-loop optimization system involving vehicle route scheduling on an interactive digital tabletop display.

2001-2001

PRIOR Data Sciences Ltd., Halifax, NS

Software Engineer

Worked with a team of software engineers to develop components of the operator (user) interface for the Communications Management System of Canadian Army's Iris Tactical Command, Control and Communications System.

1997-1998 (FT)
1996 (co-op)
1995 (co-op)

3   RESEARCH AND SCHOLARSHIP

3.1   RESEARCH CONTEXTUAL STATEMENT

I am an internationally recognized researcher in the areas of Human-Computer Interaction and Emerging Technology Design, with over 5600 citations internationally to my 120+ publications. I have raised/co-raised over $11.2 M in research funding and supervised/co-supervised over 100 high-qualified personnel (URAs, Masters, PhDs, PDFs, RA staff). I am actively engaged, and sought-after, in the international research community as a grant and article reviewer, as a conference and workshop organizer, and as a technical program committee member.

I sincerely believe that strong communities accomplish greater things, and have broader, more lasting impact that individuals can achieve on their own. This belief permeates all aspects of my academic life, including research, teaching, and service. I have been an active community builder, locally, nationally, and internationally. I have co-founded four major research networks and three long-standing, active research communities. Each community was strategically developed to provide opportunities for myself, my students, and my colleagues to share knowledge, to gain exposure to new academic cultures, methods, and tools, and to cultivate new academic and industrial partners that could work together to have greater impact than we could do alone.

Throughout my career, I have explored the design of computer systems to support collaboration and social interactions. Historically, this research focused on the design of interactive, large displays and multi-display systems (i.e., interactive surfaces), particularly for supporting small-group, face-to-face collaboration. More recently, my research has focused on designing social media interfaces to better support online communication and interactions within global, multilingual and multicultural communities, such as global music fandoms.

When I joined Guelph in 2016, I also started exploring the fields of Precision Livestock Farming (PLF) and Precision Agriculture (PA). I am still building relevant connections in these highly interdisciplinary areas, but so far I have successfully collaborated with beef and dairy experts from Animal Biosciences (T. DeVries and K. Wood) to investigate PLF technology use in Ontario beef and dairy farms. I have worked with D. Tulpan (Animal Biosciences) and M. Gong (CS) to explore automatic monitoring of livestock in outdoor habitats using aerial imagery, and I have worked with A. Biswas (Environmental Sciences) to explore applications of artificial intelligence and computer vision in crop agriculture. Our first study on dairy farmer use of digital technologies earned a **Best Paper** at the *EAI International Conference on Interactive Digital Media (ICIDM)* in July 2021, and a novel approach for harmonizing soil data into a unified information system for soil scientists and crop farmers earned the **2025 Editor's Choice Award** from the *Canadian Journal of Soil Science*.

3.2   PUBLICATIONS

Unless otherwise noted, author order reflects the relative extent of each author's contribution. In all cases, I contributed directly to writing and editing of publications, and ongoing research supervision of HQP-authored papers. Competitive, rigorously peer-reviewed **conferences** or **conference-affiliated journals** are the primary venue for disseminating research in human-computer interaction, especially conferences archived in the ACM digital library. Thus, I target conferences such as the ACM Conference on Human Factors in Computing Systems (CHI; considered the premier publishing venue for the field of human-computer interaction with highly competitive acceptances rates of 20-25%), the ACM Conference on Computer-Support Cooperative Work and Social Computing (CSCW, highly competitive; premier venue for subfield of collaborative and social computing), and the ACM Conference on Interactive Surfaces and Spaces (ISS; formerly ACM ITS and IEEE Tabletop; highly competitive and primary venue for subfield of interactive surfaces). To indicate the journal-quality peer review process these conferences use, both the CSCW and ISS conferences have transitioned to a journal model, whereby papers submitted to the journal *Proceedings of the ACM – Human Computer Interaction (PACM-HCI)* are invited to present their published articles at these conferences. For earlier work related to human factors and automation, I targeted the Annual Meeting of the Human Factors and Ergonomic Society (HFES), the top academic conference in the broader area of human factors. For recent research in Precision Livestock Farming and Precision Agriculture, I target suitable international peer-reviewed journals that span technology, animal health and welfare, and agriculture. All HQP co-authors whom I directly supervised are <u>underlined</u>.

3.2.1 Refereed Journal Papers

1. Naeimi, M., Daggupati, P., Krzic, M., **Scott, S.**, Vasava, H., Saurette, D., Biswas, A. (2025). Environmental factors in image-based soil analysis: Interaction effects of moisture, texture, and illumination. *Geoderma*, Volume 463, Article 117547, 13 pages.

2. Jei, H.-G.; Rao, A.; Susindar, S.; **Scott, S.D.**; Sasangohar, F. (2025). Investigating the placement of an interruption recovery tool for supervisory-level command and control missions. *Human-Intelligent Systems Integration* (2025). August 2025, Article 10.1007/s42454-025-00065-z, 12 pages.

3. Naeimi, M., Porwal, V., **Scott, S.D.**, Krzic, M., Daggupati, P., Vasava, H., Saurette, D., Biswas, A., Roul, A., Biswas, A. (2025). Deep metric learning for soil organic matter prediction: A novel similarity-based approach using smartphone-captured images. *Computers and Electronics in Agriculture (CompAg)*, 237, Part C, October 2025, Article 110728.

4. Naeimi, M., Krzic, M., **Scott, S.**, Daggupati, P., Biswas, A. (2025). Optimizing image-based soil organic matter prediction: Effects of illumination type and intensity. *Smart Agricultural Technology*. Vol. 11, Article 100922, 1-11.

5. Gobezie, T.B., Saurette, D., **Scott, S.D.**, Daggupati, P., Bedard-Haughn, A., Biswas, A. (2025). Application of Multidimensional Soil Data Harmonization to Develop the Ontario Soil Information System (OSIS). *Canadian Journal of Soil Science*. 105, 1-15.

   ** 2025 Editor's Choice selection **

6. Neethirajan, S., **Scott, S.**, Mancini, C., Boivin, X., Strand, E. (2024). Human-computer interactions with farm animals—enhancing welfare through precision livestock farming and artificial intelligence. *Frontiers in Veterinary Science*. 11, Article 1490851.

7. Gobezie, T.B., **Scott, S.D.**, Daggupati, P., Bedard-Haughn, A., Biswas, A. (2024). Soil data recency: The foundation for harmonizing soil data across time. *Journal of Environmental Management*, 364 (July 2024), Article 121484.

8. Kumar, N., Adams, J. A., Buxton, B., Candy, L., Cesar, P., Clark, L., Cowan, B. R., Dey, A., Dugas, P. O. T., Edmonds, E., Goodrich, M. A., Green, M., Grudin, J., Kitamura, Y., Konstan, J., Latulipe, C., Lee, M., Malone, T., Mandryk, R., Markopoulos, P., Muller, M., Nacke, L., Nakano, Y., Obrist, M., Porcheron, M., Sarcevic, A., Schöning, J., **Scott, S.**, Sharif, B., Steinicke, F., Stumpf, S., Tse, E., Vinayagamoorthy, V. (2022). A chronology of SIGCHI conferences: 1983 to 2022. *Interactions*, 29 (6), 34-41.

9. Makinde, A., Islam, M.M., Wood, K.M, Conlin, E., Williams, M., **Scott, S.D.** (2022). Investigating Perceptions, Adoption, and Use of Precision Livestock Farming Technologies in the Canadian Beef Industry. *Computers and Electronics in Agriculture (CompAg) (Elsevier), Special Issue on Smart Agriculture,* Volume 198, July 2022, page 107095, 23 pages.

10. Homaeian, L., Wallace, J.R., **Scott, S.D.** (2022). Handoff and Deposit: Designing Temporal Coordination in Cross-Device Transfer Techniques for Mixed-Focus Collaboration. *Proceedings of the ACM Human-Computer Interaction (PACM-HCI), 6, CSCW2,* Article 301, 23 pages.

11. Homaeian, L., Wallace, J.R., **Scott, S.D.** (2021). Joint Action Storyboards: A Framework for Visualizing Communication Grounding Costs. *Proceedings of the ACM Human-Computer Interaction (PACM-HCI)*. 5, CSCW1, Article 28 (April 2021), 27 pages.

12. **Scott, S.D.**, Besacier, G., Goyal, N., Cento, F. (2021). Investigating Cross-Device Transfer in Table-Centric Multi-Surface Environments. *Concurrency and Computation: Practice and Experience (Wiley),* 33(8), 13 pgs.

13. Sasangohar, F., **Scott, S.D.**, Cummings, M.L. (2014). Supervisory-level Interruption Recovery in Time-critical Control Tasks. Applied Ergonomics: Human Factors in Technology and Society (Elsevier), July 2014, 45 (4), 1148-1156.

14. Wallace, J.R., **Scott, S.D**., Lai, E., Jajalla, D. (2011). Investigating the Role of a Large, Shared Display in Multi-Display Environments. J. Computer Supported Cooperative Work (CSCW), 20(6), 529-561.

15. Tang, C., Carpendale, S., **Scott, S.D.** (2010). InfoFlow Framework for Information Flow during Nursing Shift Change. Int'l J. Human-Computer Interaction (IJHCI), 26(5), 477-505.

16. Wallace, J.R., **Scott, S.D.**, Stutz, T., Enns, T. & Inkpen, K.M. (2009). Investigating Teamwork and Taskwork in Single and Multi-Display Groupware Systems. *Personal and Ubiquitous Computing*, 13(8), 569-581.

17. Drury, J. & **Scott, S.D.** (2008). Awareness in Unmanned Aerial Vehicle Operations. International Journal of Command and Control, 2(1), 1-28.

18. **Scott, S.D.** & Carpendale, S. (eds.) (2006). Guest Editors' Introduction: Interacting with Digital Tabletops. *IEEE Computer Graphics & Applications*, 26(5), 24-27.

19. **Scott, S.D.**, Carpendale, S., Habelski, S. (2005). Storage Bins: Mobile Storage for Collaborative Tabletop Displays. *IEEE Computer Graphics & Applications*, 25(4), 58-65.

20. Kruger, R., Carpendale, M.S.T., **Scott, S.D.**, Greenberg, S. (2004). Roles of Orientation in Tabletop Collaboration: Comprehension, Coordination and Communication. *Journal of Computer Supported Collaborative Work*, 13(5-6), 501-537.

21. **Scott, S.D.**, Mandryk, R.L., Inkpen, K.L. (2003). Understanding Children's Collaborative Interactions in Shared Environments. *Journal of Computer-Aided Learning*, 19 (2), 220-228.

3.2.2 Conference Papers (Full length, Fully refereed)

22. Porwal, V., Scott, S.D., Bruce, N.D.B, Biswas, A. (2025). WSCurLe: Weakly Supervised Curriculum Learning for Foundational Vision and Language Architectures in Digital Soil Mapping. *Proceedings of the 22nd Conference on Robots and Visions (CRV 2025)*, May 26-29, 2025, Calgary, AB, 9 pages.

23. Porwal, V., Scott, S.D., Bruce, N.D.B, Biswas, A. (2024). SLVVA: Scalable Land Viability via Vision-Language Architecture. *Proceedings of the 21st Conference on Robots and Visions (CRV 2024)*, May 27-31, 2024, Guelph, ON, 8 pages.

24. Makinde, A., Islam, M.M., Wood, K.M, Conlin, E., Williams, M., **Scott, S.D.** (2022). Digital technology adoption on Canadian beef feedlot farms. *Proceedings of ECPLF 2022: European Conference on Precision Livestock Farming*, Aug 29-Sep 2, 2022, Vienna, Austria, 8 pgs.

25. Islam, M.M., **Scott, S.D.** (2021). Exploring the Effects of Precision Livestock Farming Notification Mechanisms on Canadian Dairy Farmers. *Proceedings of EAI International Conference on Interactive Digital Media (ICIDM) 2021*, July 30-August 1, 2021, Johor Bahru, Malaysia (online), 8 pages.

   ** BEST PAPER AWARD (the only best paper overall for the conference) **

26. Makinde, A., Islam, M.M., **Scott, S.D.** (2019). Opportunities for ACI in PLF: Applying Animal-and User-Centred Design to Precision Livestock Farming *Proceedings of ACI 2019: Sixth International Conference on Animal-Computer Interaction*, Nov 12-14, 2019, Haifa, Israel. Article No. 13, 6 pgs.

27. Pafla, M., Wong, C., Gillis, D., Pfeil, U., **Scott, S.D.** (2019). Jumping on the Bandwagon: Overcoming Social Barriers to Public Display Use. *Proceedings of the 45th Graphics Interface Conference*, May 28-31, 2019, Kingston, ON. Article No. 21, 9 pgs.

28. Varona-Marin, D., Oberholzer, J.A., Tse, E., **Scott, S.D.** (2018). Post-meeting Curation of Whiteboard Content Captured with Mobile Devices. *Proceedings of ISS 2018: ACM International Conference on Interactive Surfaces and Spaces*, Nov 25-28, 2018, Tokyo, Japan, 43-52.

   ** BEST PAPER HONORABLE MENTION, awarded to <5% of submissions. **

29. Ghare, M., Pafla, M., Wong, C., Wallace, J.R., **Scott, S.D.** (2018). Increasing Passersby Engagement with Public Large Interactive Displays: A Study of Proxemics and Conation. *Proceedings of ISS 2018: ACM International Conference on Interactive Surfaces and Spaces*, Nov 25-28, 2018, Tokyo, Japan, 19-32.

30. Homaeian, L., Goyal, N., Wallace, J.R., **Scott, S.D.** (2018). Group vs Individual: Impact of TOUCH and TILT Cross-Device Interactions on Mixed-Focus Collaboration. *Proceedings of CHI 2018: ACM Conference on Human Factors in Computing Systems*, April 21-26, 2018, Montreal, QC, Paper No. 73, 13 pgs.

31. Susindar, S., Sasangohar, F., **Scott, S.D.**, Cummings, M. (2017) Investigating the Location of an Interruption Recovery Tool for Supervisory-Level Command and Control Missions. *Proceedings of HFES 2017: Annual Meeting of the Human Factors and Ergonomics Society*, October 9-13, 2017, Austin, TX, 699-703.

32. Harris, J., Hancock, M., **Scott, S.D.** (2016). Leveraging Asymmetries in Multiplayer Games: Investigating Design Elements of Interdependent Play. *Proceedings of CHI Play 2016: ACM Annual Symposium on Computer-Human Interaction in Play*, October 16-19, 2016, Austin, TX, 350-361.

33. Cheung, V. & **Scott, S.D.** (2015). Studying Attraction Power in Proxemics-Based Visual Concepts for Large Public Interactive Displays. *Proceedings of ITS 2015: ACM Conference on Interactive Tabletops and Surfaces,* November 16-18, 2015, Madeira, Portugal, 93-102.

34. Chang, Y.-L.B., Fong, C., Tse, E., Hancock, M., **Scott, S.D.** (2015). "Callout Bubble Saved My Life": Workspace Awareness Support in BYOD Classrooms. *Proceedings of ITS 2015: ACM Conference on Interactive Tabletops and Surfaces,* November 16-18, 2015, Madeira, Portugal, 73-82.

35. Cheung, V. & **Scott, S.D.** (2015). A Laboratory-based Study Methodology to Investigate Attraction Power of Large Public Interactive Displays. *Proceedings of UBICOMP 2015: ACM Conf. on Ubiquitous and Pervasive Computing*, September 7-11, 2015, Osaka, Japan, 1239-1250.

    ** BEST PAPER HONORABLE MENTION, awarded to <5% of submissions. **

36. **Scott, S.D.**, Besacier, G., Tournet, J., Goyal, N., Haller, M. (2014). Surface Ghosts: Promoting Awareness of Transferred Objects during Pick-and-Drop Transfer in Multi-Surface Environments. *Proceedings of ITS 2014: ACM Conference on Interactive Tabletops and Surfaces*, November 16-19, 2014, Dresden, Germany, 99-108.

37. Chang, Y.-L.B., **Scott, S.D.**, Hancock, M. (2014). Supporting Situation Awareness in Collaborative Tabletop Systems with Automation. *Proceedings of ITS 2014: ACM Conference on Interactive Tabletops and Surfaces*, November 16-19, 2014, Dresden, Germany, 185-194.

38. Langer, R., Hancock, M., **Scott, S.D.** (2014). Suspenseful Design: Engaging Emotionally with Complex Applications through Compelling Narratives. *Proceedings of GEM 2014: IEEE Conference on Games, Entertainment and Media*, October 22-24, 2014, Toronto, ON, 1-8.

39. **Scott, S.D.**, Besacier, G., McClelland, P.J. (2014). Cross-Device Transfer in a Collaborative Multi-Surface Environment without User Identification. *Proceedings of CTS 2014: International Conference on Collaboration Technologies and Systems*, May 19-16, Minneapolis, MN, USA, 219-226.

    ** Awarded OUTSTANDING PAPER RUNNER UP **

40. Lindlbauer, D., Haller, M., Hancock, M.S., **Scott, S.D.**, Stuerzlinger, W. (2013). Perceptual Grouping: Selection Assistance for Digital Sketching. *Proceedings of ITS 2013: ACM Conf. on Interactive Tabletops and Surfaces*, October 6-9, 2013, St. Andrews, Scotland, 51-60.

41. Sasangohar, F., **Scott, S.D.**, Donmez, B. (2013). Interruption Recovery in Time-critical Supervisory Control: A Literature Review. *Proceedings of HFES 2013: Annual Meeting of the Human Factors and Ergonomics Society*, Sept 30-Oct 4, 2013, San Diego, CA, 1745-1749.

42. Wallace, J.R., **Scott, S.D.**, MacGregor, C. (2013). Prioritization, Comparisons, and Tableaux: Collaborative Sensemaking on Digital Tables and Handheld Tablets. *Proceedings of CHI 2013: ACM Conference on Human Factors in Computing Systems*, April 27-May 2, 2013, Paris, France, 3345-3354.

43. Ion, A., Chang, Y.-L., Haller, M., Hancock, M., **Scott, S.D.** (2013). Canyon: Providing Location Awareness of Multiple Moving Objects in a Detail View on Large Displays. *Proceedings of CHI 2013: ACM Conference on Human Factors in Computing Systems*, April 27-May 2, 2013, Paris, France, 3149-3158.

    ** BEST PAPER HONORABLE MENTION, awarded to <5% of submissions. **

44. Seto, A.M., **Scott, S.D.**, Hancock, M. (2012). Investigating Menu Discoverability on a Digital Tabletop in a Public Setting. *Proceedings of ITS 2012: ACM Conference on Interactive Tabletops and Surfaces*, November 11-14, 2012, Boston, MA, 71-80.

45. Seifried, T., Haller, M., Rendl, C., **Scott, S.D.** (2012). Regional Undo/Redo Techniques for Large Interactive Surfaces. *Proceedings of CHI 2012: ACM Conference on Human Factors in Computing Systems*, May 5-10, 2012, Austin, TX, 2855-2864.

46. Cheung, V., Chang, Y.-L., **Scott, S.D.** (2012). Communication Channels and Awareness Cues in Collocated Collaborative Time-Critical Gaming. *Proceedings of CSCW 2012: ACM Conference on Computer-Supported Cooperative Work*, February 11-15, 2012, Seattle, WA, 569-578.

47. McClelland, P., Whitmell, S., **Scott, S.D.** (2011). Investigating Communication and Social Practices in Real-Time Strategy Games: Are In-Game Tools Sufficient to Support the Overall Gaming Experience? *Proceedings of Graphics Interface 2011*. May 25-27, 2011, St. John's, NF, 215-222.

48. Hunter, S., Maes, P., **Scott, S.D.**, Kaufman, H. (2011). MemTable: An Integrated System for Capture and Recall of Shared Histories in Group Workspaces. *Proceedings of CHI 2011: ACM Conf. Human Factors in Computing Systems*. May 7-12, 2011, Vancouver, 3305-3314.

49. Haller, M., Leitner, J., Seifried, T., Brandl, P., Richter, C., Gokcezade, A., Scott, S.D., Wallace, J.R., Hunter, S. (2010). The NiCE Discussion Room: Integrating Paper and Digital Media to Support Co-Located Group Meetings. *Proceedings of CHI 2010: ACM Conference on Human Factors in Computing Systems*, April 10-15, 2010, Atlanta, GA, 609-618.

50. Seifried, T., Haller, M., **Scott, S.D.**, Perteneder, F., Rendl, C., Sakamoto, D., Inami, M. (2009). CRISTAL: A Collaborative Home Media and Device Controller Based on a Multi-touch Display. *Proceedings of ITS 2009 (formerly IEEE Tabletop): ACM International Conference on Interactive Tabletops and Surfaces*, November 23-25, 2009, Banff, AB, 37-44.

51. Histon, J.M. & **Scott, S.D.** (2009). Expert Panels as a Means of Engaging Students in the Applications of Human Factors. *Proceedings of HFES 2009: 53rd Annual Meeting of the Human Factors and Ergonomic Society*, October 19-23, 2009, San Antonio, TX, 474-478.

52. Sasangohar, F., MacKenzie, I.S., **Scott, S.D.** (2009). Evaluation of Mouse and Touch Input for a Tabletop Display Using Fitts' Reciprocal Tapping Task. *Proceedings of HFES 2009: 53rd Annual Meeting of the Human Factors and Ergonomic Society*, October 19-23, 2009, San Antonio, TX, 839-843.

53. Burns, C., Torenvliet, G., Chalmers, B., **Scott, S.D.** (2009). Work Domain Analysis for Establishing Collaborative Work Requirements. *Proceedings of HFES 2009: 53rd Annual Meeting of the Human Factors and Ergonomic Society*, October 19-23, 2009, San Antonio, TX, 314-318.

54. Wallace, J.R. & **Scott, S.D.** (2008). Contextual Design Considerations for Co-located, Collaborative Tables. *Proceedings of Tabletop 2008: IEEE International Workshop on Tabletop and Interactive Surfaces*, October 1-3, 2008, Amsterdam, The Netherlands, 57-64.

55. **Scott, S.D.**, Mercier, S., Cummings, M.L., Wang, E. (2006). Assisting Interruption Recovery in Supervisory Control of Multiple UAVs. *Proceedings of HFES 2006: 50th Annual Meeting of the Human Factors and Ergonomic Society*, October 16-20, 2006, San Francisco, CA, 699-703.

56. Nehme, C.E., **Scott, S.D.**, Cummings, M.L., Furusho, C.Y. (2006). Generating Requirements for Futuristic Heterogeneous Unmanned Systems. *Proceedings of HFES 2006: 50th Annual Meeting of the Human Factors and Ergonomic Society*, October 16-20, 2006, San Francisco, CA, 235-239.

57. Hinrichs, U., Carpendale, S., **Scott, S.D.** (2006). Evaluating the Effects of Fluid Interface Components on Tabletop Collaboration. *Proceedings of AVI 2006: Conference on Advanced Visual Interfaces*, May 23-26, 2006, Venetia, Italy, 27-34.

58. Hinrichs, U., Carpendale, S., **Scott, S.D.**, Pattison, E. (2005). Interface Currents: Supporting Fluent Collaboration on Tabletop Displays. *Proceedings of the Symposium on Smart Graphics, Lecture Notes in Computer Science*, Aug, 22-24, 2005, Frauenwoerth Cloister, Germany, 185-197.

59. Kruger, R., Carpendale, M.S.T., **Scott, S.D.**, Tang, A. (2005). Fluid Integration of Rotation and Translation. *Proceedings of CHI 2005: ACM Conference on Human Factors in Computing Systems, CHI Letters*, 7(1), April 2-7, 2005, Portland, OR, 601-610. (Earlier version available as Research Report 2004-747-12, Department of Computer Science, University of Calgary.) .

60. **Scott, S.D.**, Carpendale, M.S.T., Inkpen, K.M. (2004). Territoriality in Collaborative Tabletop Workspaces. *Proceedings of CSCW 2004: ACM Conference on Computer-Supported Cooperative Work, CHI Letters*, 6(3), November 6-10, 2004, Chicago, IL, 294-303. (Earlier version available as Research Report 2004-743-08, Department of Computer Science, University of Calgary.)

61. Tse, E., Histon, J., **Scott, S.D.**, Greenberg, S. (2004). Avoiding Interference: How People Use Spatial Separation and Partitioning in SDG Workspaces. *Proceedings of CSCW 2004: ACM Conference on Computer-Supported Cooperative Work*, Nov 6-10, 2004, Chicago, IL, 252-261. (Earlier version: Research Report 2003-729-32, Department of Computer Science, University of Calgary.)

62. Kruger, R., Carpendale, M.S.T., **Scott, S.D.**, Greenberg, S. (2003). How People Use Orientation on Tables: Comprehension, Coordination and Communication. *Proceedings of GROUP 2003: ACM Group 2003 Conference*, November 9-12, 2003, Sanibel Island, FL, 369-378.

63. **Scott, S.D.**, Grant, K.D., Mandryk, R.L. (2003). System Guidelines for Co-located, Collaborative Work on a Tabletop Display. *Proceedings of ECSCW 2003: European Conference Computer-Supported Cooperative Work*, September 14-18, 2003, Helsinki, Finland, 159-178.

64. **Scott, S.D.**, Lesh, N., Klau, G.W. (2002). Investigating Human-Computer Optimization. *Proceedings of CSCW 2002: ACM Conference on Human Factors in Computing Systems, CHI Letters,* 4(1), April 20-25, 2002, Minneapolis, MN, 155-162.

65. **Scott, S.D.**, Mandryk, R.L, Inkpen, K.M. (2002). Understanding Children's Interactions in Synchronous Shared Environments. *Proceedings of CSCL 2002: Conference on Computer Supported Collaborative Learning*, January 7-11, 2002, Boulder, CO, 333-341.

66. **Scott, S.D.**, Shoemaker, G., Inkpen, K.M. (2000). Towards seamless support of natural collaborative interactions. *Proceedings of Graphics Interface 2000*, May 15-17, 2000, Montréal, PQ, 103-110.

67. Inkpen, K.M., Ho-Ching, W., Kuederle, O., **Scott, S.D.**, Shoemaker, G. (1999). "This is fun! We're all best friends and we're all playing.": Supporting children's synchronous collaboration. In CSCL 1999: *Conference on Computer Supported Collaborative Learning,* December 12-15, 1999, Stanford, CA, 252-259.

3.2.3 Book Chapters

68. <u>Chang, Y.-L. B.</u>, **Scott, S.D.**, & Hancock, M. (2016). Usage of interactive event timelines in collaborative digital tabletops involving automation. C. Anslow, P. Campos & J. Jorge, (Eds.), *Collaboration meets interactive surfaces (CMIS) - theory and practice*. Springer.

69. Carpendale, S. and **Scott, S.D.** (2016). Humanizing the Digital Interface (Theme 1 Introduction). In F.O. Maurer (eds.). *SURFNET: Designing Digital Surface Applications*, NSERC SurfNet, University of Calgary, Calgary, AB, 19-25.

70. **Scott, S.D.,** <u>Besacier, G.</u>, <u>McClelland, P.</u>, <u>Tournet, J.</u>, <u>Goyal, N.</u>, <u>Cento, F.</u> (2016). Cross-Device Content Transfer in Table-Centric Multi-Surface Environments. In F.O. Maurer (eds.). *SURFNET: Designing Digital Surface Applications*, NSERC SurfNet, University of Calgary, Calgary, AB, 53-79.

71. Bortolaso, C., Graham, T.C.N., **Scott, S.D.**, Oskamp, M. Brown, D., Porter, L. (2016). OrMiS: Use of a Digital Surface for Simulation-Based Training. In F.O. Maurer (eds.). *SURFNET: Designing Digital Surface Applications*, NSERC SurfNet, University of Calgary, Calgary, AB, 313-331.

72. **Scott, S.D.** & Carpendale, S. (2010). Theory of Tabletop Territoriality. In C. Müller-Tomfelde (ed.) *Tabletops: Horizontal Interactive Displays*, Springer (HCI Series), 375-406.

3.2.4 Conference Papers (Short papers, Fully refereed)

73. Kuo, S., Tenedero, S., **Scott, S.D.** (2025). Fans to Friends: Human Connectedness and Social Belonging by Transnational Live streaming Platform Design. *Companion Proceedings of 2025 Conference on Computer-Supported Cooperative Work & Social Computing (CSCW'25)*, October 18-22, 2025, Bergen, Norway, 35-38.

74. Madhavan, K. Antonie, L., **Scott, S.D.** (2025). Manipulation Vector Identification: A Security Framework for Detecting and Classifying Election Misinformation Attacks. *Poster at the 10th IEEE European Symposium on Security and Privacy 2025*, June 30-July 4, 2025, Venice, Italy.

75. Kuo, S., Tenedero, S., **Scott, S.D.** (2025). From Fans to Family: Fostering Human Connectedness and Social Belonging through A Transnational Live-streaming Platform Design. *Poster at 51st Graphics Interface Conference 2025*, May 26-29, 2025, Kelowna, BC.

76. Matulis, J., Patel, M., Butt, M.H., Kuo, S., **Scott, S.D.** (2025). AI-Powered Chat Summaries for Multilingual Live-stream Chats. *Poster at 51st Graphics Interface Conference 2025*, May 26-29, 2025, Kelowna, BC.

77. Abbas, Z.J., **Scott, S.D.** (2024). Human-centred training and validation of text-based emotion detection machine learning models. *Poster at 50th Graphics Interface Conference 2024*, June 3-6, 2024, Halifax, NS.

78. Kuo, S.-Y., **Scott, S.D.** (2024). We Enjoyed but are Not Committed: How Does Multidimensional Co-experience Design Enhance Live-streaming Platform Loyalty in the Context of K-Pop Lives. *Poster at 50th Graphics Interface Conference 2024*, June 3-6, 2024, Halifax, NS.

79. Farhad, H., **Scott, S.D.** (2024). Understanding the Impact of Subtitle Availability on Comprehension: An Investigation Through Viewer Studies. *Poster at 50th Graphics Interface Conference 2024*, June 3-6, 2024, Halifax, NS.

80. Patel, M., Butt, H., **Scott, S.D.** (2024). Using AI-powered Live Chat Summaries to Overcome Language Barriers for Global K-pop Fans in Live Stream Contexts. *Poster at 50th Graphics Interface Conference 2024*, June 3-6, 2024, Halifax, NS.

81. Abbas, Z.J., Truong, P.S., Homaeian, L., **Scott, S.D.** (2023). Designing Emotive Translation Bubbles to Improve the Live Stream User Experience for Global K-pop Fans. *Poster at 49th Graphics Interface Conference 2023*, May 30-June 2, 2023, Victoria, ON.

82. Farhad, H., Homaeian, L., **Scott, S.D.** (2023). Augmenting Machine Translation of Sports Commentary to Support Global Fans. *Poster at 49th Graphics Interface Conference 2023*, May 30-June 2, 2023, Victoria, ON.

83. Islam M.M., **Scott, S.D.** (2019). Investigating the Usability and Impact of Notifications Generated from Automated Monitoring Systems in Modern Dairy Farms. *Poster at 45th Graphics Interface Conference 2019*, May 28-31, 2019, Kingston, ON.

84. Makinde A., **Scott, S.D.** (2019). Investigating Perceptions, Motivations, and Challenges in the Adoption of Precision Livestock Farming in the Beef Industry. *Poster at 45th Graphics Interface Conference 2019*, May 28-31, 2019, Kingston, ON.

85. Wallace, J.R., Houben, S., Anslow, C., Lucero, A., Rogers, Y., **Scott, S.D.** (2017). The Disappearing Tabletop: Social and Technical Challenges for Cross-Surface Collaboration. *Proceedings of ISS 2017: ACM Conference on Interactive Surfaces and Spaces*, October 17-20, 2017, 482-487.

86. Homaeian, L., Goyal, N., Wallace, J.R., **Scott, S.D.** (2017). Investigating Communication Grounding in Cross-Surface Interaction. *Proceedings of ISS 2017: ACM Conference on Interactive Surfaces and Spaces*, October 17-20, 2017, 348-353.

87. Cheung, V., **Scott, S.D.** (2016). Proxemics-Based Visual Concepts to Attract and Engage Public Display Users: Adaptive Content Motion and Adaptive User Shadow. *Proceedings of ISS 2016: ACM Conference on Interactive Surfaces and Spaces*, Niagara Falls, ON, 473-476.

88. Harris, J., Hancock, M., **Scott, S.D.** (2015). "Beam Me 'Round, Scotty!": Studying Asymmetry and Interdependence in a Prototype Cooperative Game (Game Design Competition). *Proceedings of CHI Play 2015: ACM Annual Symposium on Computer-Human Interaction in Play*, October 5-7, 2015, London, UK.
   ** STUDENT GAME DESIGN COMPETITION AWARD **
   ** STUDENT GAME DESIGN COMPETITION – PEOPLE'S CHOICE AWARD **

89. Kuzminykh, A., **Scott, S.D.**, Wallace, J., Lank, E. (2015). How to Measure Social Presence: The Role of Speech Patterns. *Poster at Graphics Interface 2015*, June 3-5, 2015, Halifax, NS.
   ** BEST POSTER AWARD **

90. Cheung, V., Watson, D., Vermeulen, J., Hancock, M., **Scott, S.D.** (2014). Overcoming Interaction Barriers in Large Public Displays Using Personal Devices. *Proc. of ITS 2014: ACM Conference on Interactive Tabletops and Surfaces*, November 16-19, 2014, Dresden, Germany, 375-380.

91. Harris, J., Hancock, M., **Scott, S.D.** (2014). "Beam Me 'Round, Scotty!": Exploring the Effect of Interdependence in Asymmetric Cooperative Games. *Proc. of CHI Play 2014: ACM Symposium on Computer-Human Interaction in Play*, October 19-22, 2014, Toronto, ON, 417-418.

92. Besacier, G., Tournet, J., Goyal, N., Cento, F., **Scott, S.D.** (2014). Object and Arm Shadows: Visual Feedback for Cross Device Transfer. *Extended Abstracts of CHI 2014: ACM Conference on Human Factors in Computing,* April 26-May 1, 2014, Toronto, ON, 463-466.

93. Chang, Y.-L.B., **Scott, S.D.**, Hancock, M., (2014). Improving Situation Awareness with an Interactive Event Timeline in Collaborative Tabletop Interfaces. *5th Annual GRAND Conference (Graphics, Animation and New Media)*, May 14-16, 2014, Ottawa, ON, 185-194.

94. Chang, Y.-L.B., Mengual, M., Parfett, B., Graham, T.N., Hancock, M., **Scott, S.D.** (2013). Improving Awareness of Automated Actions using an Interactive Event Timeline. *Proceedings of ITS 2013: ACM Conference on Interactive Tabletops and Surfaces*, October 6-9, 2013, St. Andrews, Scotland, 353-356.

95. Cheung, V., **Scott, S.D.** (2013). Investigating Attraction and Engagement of Animation on Large Interactive Walls in Public Settings. *Extended Abstracts of ITS 2013: ACM Conference on Interactive Tabletops and Surfaces*, October 6-9, 2013, St. Andrews, Scotland, 381-384.

96. Tournet, J., Besacier, G., Goyal, N., McClelland, P.J., **Scott, S.D.** (2013). Comparing Visual Feedback Techniques for Object Transfer between Private and Shared Surfaces. *Proceedings of ITS 2013: ACM Conference on Interactive Tabletops and Surfaces*, October 6-9, 2013, St. Andrews, Scotland, 377-380.

97. Cheung, V., **Scott, S.D.**, Heydekorn, J., Dachselt, R. (2012). Revisiting Hovering: Interaction Guides For Interactive Surfaces. *Proceedings of ITS 2012: ACM Conference on Interactive Tabletops and Surfaces*, November 11-14, 2012, Boston, MA, 355-358.

98. **Scott, S.D.**, McClelland, P., Besacier, G. (2012). Bridging Private and Shared Interaction Surfaces in Co-located Group Settings. *Proceedings of ITS 2012: ACM Conference on Interactive Tabletops and Surfaces*, November 11-14, 2012, Boston, MA, 403-406.

99. Wallace, J.R., Pape, J., Chang, Y.-L.B., McClelland, P.J., Graham, T.N., **Scott, S.D.**, Hancock, M. (2012). Exploring Automation in Digital Tabletop Board Games. *Extended Abstracts of CSCW 2012: ACM Conf. on Comp. Supported Cooperative Work*, Feb. 11-15, 2012, Seattle, 231-234.

100. Cheaib, N., Cheung, V., Cerar, K., **Scott, S.D.** (2011). A Multi-Agency Collaboration and Coordination Hub. *Poster at Graphics Interface 2011*. May 25-27, 2011, St. John's, NF.

101. Cheung, V., Cheaib, N., **Scott, S.D.** (2011). Interactive Surface Technology for a Mobile Command Centre. *Extended Abstracts of CHI2011: ACM International Conference on Human Factors in Computing Systems*. May 7-12, 2011, Vancouver, BC, 1771-1776.

102. McClelland, P.J., Whitmell, S.J., Tangao, K., **Scott, S.D.** (2009). ASPECTS: A Support Tool for Collaborative Strategic Planning and Asset Allocation Tasks. *Conference Supplement of ITS 2009 (formerly IEEE Tabletop): ACM International Conference of Interactive Tabletops and Surfaces*, November 23-25, 2009, Banff, AB.

103. <u>H.Gashti, S.</u>, <u>Chen, L.</u>, **Scott, S.D.** (2009). Investigating the Impact of Table Size on Collaborative Problem-Solving. *Conference Supplement of ITS 2009 (formerly IEEE Tabletop): ACM International Conference of Interactive Tabletops and Surfaces*, November 23-25, 2009, Banff, AB.

104. <u>Seifried, T.</u>, Rendl, C., Perteneder, F., Leitner, J., Haller, M., Sakamoto, D., Inami, M., **Scott, S.D.** (2009). CRISTAL, Control of Remotely Interfaced Systems using Touch-based Actions in Living Spaces (E-Tech Demonstration). *Conference Supplement of SIGGRAPH 2009: ACM Int'l Conf. on Computer Graphics and Interactive Technologies*, August 4-6, 2009, New Orleans, LA.

   **AWARDED BEST EMERGING TECHNOLOGY DEMO **

105. Isenberg, T., Nix, S., Schwarz, M., Miede, A., **Scott, S.D.**, Carpendale, S. (2008) Mobile Spatial Tools for Fluid Interaction. *Conference Supplement of Tabletop 2008: IEEE International Workshop on Tabletop and Interactive Surfaces*.

106. <u>H.Gashti, S.</u>, <u>McKay, P.</u>, <u>Sasangohar, F.</u>, <u>Wallace, J.R.</u>, **Scott, S.D.** (2008). Recovery Central: Interruption Recovery in Distributed Meetings. *Conference Supplement of GI 2008: Graphics Interface Conference*, May 28-30, 2008, Windsor, ON.

107. <u>Wallace, J.R.</u>, <u>Enns, T.</u>, <u>Stutz, T.</u>, **Scott, S.D.** (2008). Exploring Teamwork and Taskwork in Multi-Display Groupware. *Conference Supplement of GI 2008: Graphics Interface Conference*, May 28-30, Windsor, ON.

108. Ashdown, M. & **Scott, S.D.** (2007). Designing Tabletop Interfaces for Asymmetric Distributed Collaboration. *Conference Supplement of Tabletop 2007: IEEE International Workshop on Tabletop and Interactive Surfaces,* October 10-12, 2007, Newport, RI.

3.2.5   Conference Papers (Full length, Refereed abstracts)

109. Gobezie, T. B., Daggupati, P., **Scott, S.**, Bedard-Haughn, A. K., & Biswas, A. (2022). Accounting for Age of Legacy Soil Data to Create Digital Soil Maps, the Case of Soil Carbon Stock Map of Ontario Province in Canada. ASA/CSSA/SSSA Int'l Annual Meeting, November 6-9, 2022, Baltimore, MD. Paper 146357.

110. MacGregor, C.G., **Scott, S.D.**, Borland, M.J. (2017). Using Accountability Logs to Assess Individual Student Contributions to Capstone Projects: What happens when one student on a team fails? *Proceedings of CEEA 2017: Canadian Engineering Association Annual Conference*, June 4-7, 2017, Toronto, ON, Canada.

111. Carpendale, S., Isenberg, T., **Scott, S.D.**, <u>Hinrichs, U.</u>, Miede, A., Kruger, R., <u>Habelski, S.</u>, Inkpen, K.M. (2006). Collaborative Interaction on Large Tabletop Displays. *Adjunct Proceedings of CSCW 2006: ACM Conference on Computer-Supported Cooperative Work*, Nov. 4-8, Banff, AB, 57-58.

112. <u>Hinrichs, U.</u>, Carpendale, S., **Scott, S.D.** (2005). Interface Currents: Supporting Fluent Face-to-Face Collaboration (Sketch Presentation). *Proceedings of SIGGRAPH'05: ACM Conference on Computer Graphics and Interactive Techniques (CD Proceedings)*, July 31-August 4, 2005, Los Angeles, CA.

113. **Scott, S.D.** (2003). Territory-Based Interaction Techniques for Tabletop Collaboration (Doctorial Colloquium Presentation and Poster). In *Conference Supplement of UIST 2003: ACM Symposium on User Interface Software and Technology*, November 2-5, 2003, Vancouver, BC, 17-20.

114. Mandryk, R.L., **Scott, S.D.**, Inkpen, K.L. (2002). Display Factors Influencing Co-located Collaboration (Poster). In *Extended Abstracts of CSCW 2002*: *ACM Conference on Computer-Supported Cooperative Work*, November 16-20, 2002, New Orleans, LA, 137-138.

115. Bortolaso, C., Graham, T.C.N., **Scott, S.D.**, Oskamp, M., Brown, D., Porter, L. (2014). From Personal Computers to Collaborative Digital Tabletops to Support Simulation Based-Training. *Proceedings of ICCRTS 2014: 19th Annual International Command and Control Research and Technology Symposium*, June 16-19, Alexandria, VA.

116. Alqahtani, M., Histon, J.M., **Scott, S.D.** (2013) Designing an Interruption Management Experiment: Evaluating the Working Awareness Interruption Tool (Wait) For Air Traffic Controllers. *Proceedings of CASI 2013: Canadian Aeronautics and Space Institute 60th Aeronautics Conference and Annual General Meeting*, April 30-May 2, 2013, Toronto, ON.

117. Ouellet, J.-N., Harvey, E.R., Echevarria, J., Franck, G., **Scott, S.D.** (2012). Computer vision application using the Kinect sensor for the identification and tracking of users interacting with a surface computing platform. *Proceedings of the 2012 Applied Vision and Robotics Workshop*, May 8-9, 2012, Montreal, QC, May 8-9, 2012, 74-86.

118. <u>McKay, P.</u>, **Scott, S.D.**, Histon, J., Torenvliet, G. (2011). A Video Prototyping Methodology for Evaluating Novel Interface Concepts in Cockpit Displays. *Proceedings of ISAP2011: 16th International Symposium on Aviation Psychology*, May 2-5, 2011, Dayton, OH.

119. <u>Glussich, D.</u>, Histon, J.M., **Scott, S.D.** (2011). Application of Communication Grounding Framework to Assess Effectiveness of Human-Automation Interface Design: A TCAS Case Study. *Proceedings of ISAP2011: Int'l Symposium on Aviation Psychology*, May 2-5, 2011, Dayton, OH.

120. **Scott, S.D.**, <u>Allavena, A.</u>, <u>Cerar, K.</u>, Franck, G., Hazen, M., Shuter, T., Colliver, C. (2010). Investigating Tabletop Interfaces to Support Collaborative Decision-Making in Maritime Operations. *Proceedings of ICCRTS 2010: 15th Annual International Command and Control Research Technology Symposium*, June 22-24, 2010, Santa Monica, CA.

121. <u>McKay, P.</u>, **Scott, S.D.**, Histon, J.M., Torenvliet, G.L. (2009). Investigating Interaction Conflicts in Collaborative Cockpit Displays. *Proceedings of AIAA Infotech@Aerospace 2009 Conference and Exhibit*, April 6-9, 2009, Seattle, WA.

122. **Scott, S.D.**, <u>Sasangohar, F.</u>, Cummings, M.L. (2009). Investigating Supervisory-level Activity Awareness Displays for Command and Control Operations. *Proceedings of HSIS 2009: ASNE Human Systems Integration Symposium*, March 17-19, 2009, Annapolis, MD.

123. **Scott, S.D.**, <u>Wan, J.</u>, <u>Sasangohar, F.</u>, Cummings, M.L. (2008). Mitigating Supervisory-level Interruptions in Mission Control Operations. *Proceedings of the International Conference on Applied Human Factors and Ergonomics*, July 14-17, 2008, Las Vegas, NV.

124. **Scott, S.D.**, <u>Wan, J.</u>, <u>Rico, A.</u>, <u>Furusho, C.</u>, Cummings, M.L. (2007). Aiding Team Supervision in Command and Control Operations with Large-Screen Displays. *Proceedings of HSIS 2007: ASNE Human Systems Integration Symposium*, March 19-21, 2007, Annapolis, MD.

125. **Scott, S.D.**, Cummings, M.L., Graeber, D.A., Nelson, W.T., Bolia, R.S. (2006). Collaboration Technology in Military Team Operations: Lessons Learned from the Corporate Domain. *Proceedings of CCRTS 2006: Command and Control Research and Technology Symposium*, June 20-22, 2006, San Diego, CA.

126. Inkpen, K.M., Hawkey, K., Kellar, M., Mandryk, R.L., Parker, J.K., Reilly, D., **Scott, S.D.**, Whalen, T. (2005). Exploring Display Factors that Influence Co-Located Collaboration: Angle, Size, Number, and User Arrangement. *Proceedings of HCI International 2005*, July 22-27, 2005, Las Vegas, NV.

3.2.6 Conference Workshop papers

127. <u>Madhavan, K.</u> Antonie, L., **Scott, S.D.** (2025). FLARE: An Error Analysis Framework for Diagnosing LLM Classification Failures. *In Interdisciplinary Workshop on Observations of Misunderstood, Misguided and Malicious Use of Language Models (OMMM 2025), held with International Conference on Recent Advances in Natural Language Processing (RANLP),* Varna, Bulgaria, September 11-13, 2025.

128. **Scott, S.D.** (2018). Interfaces for Farm Animals and their Caretakers in Outdoor (and Harsh Indoor) Computing Contexts. In *CHI 2018: ACM Conference on Human Factors in Computing Systems: Workshop on HCI Outdoors,* April 2018, Montreal, QC.

129. <u>Chang, Y.-L.B.</u>, **Scott, S.D.**, Hancock, M., (2014). Improving Situation Awareness with an Interactive Event Timeline in Collaborative Tabletop Interfaces. *5th Annual GRAND Conference (Graphics, Animation and New Media)*, May 2014, Ottawa, ON.

130. <u>Chang, Y.-L.,B.</u>, Hancock, M., **Scott, S.D.**, Pape, J., Graham, T.C.N. (2012). Improving the Social Gaming Experience by Comparing Physical and Digital Tabletop Board Games. In *Games and Fun: Workshop on Conceptualising, Operationalising and Measuring the Player Experience in Videogames*, September 2012, Toulouse, France.

131. <u>Wallace, J.R.</u>, **Scott, S.D.** (2008). Towards context design requirements for multi-display environments. In *CSCW 2008: ACM Conference on Computer-Supported Cooperative Work: Workshop on Authentic Collaboration with Multiple Displays*, November, 2008, San Diego, CA.

132. **Scott, S.D.** (2004). Repurposing Social Science Theories to Design and Evaluate Co-located Collaboration Technologies. In *CSCW 2004: ACM Conference on Computer-Supported Cooperative Work: Workshop on Methodologies for Evaluating Collaboration in Co-located Environments*, November 2004, Chicago, IL.

133. **Scott, S.D.** (2002). Exploring Tabletop Collaboration. In *UBICOMP 2002: Conference on Ubiquitous Computing: Workshop on Collaboration with Interactive Walls and Tables*, September 2002, Göteborg, Sweden.

134. Inkpen, K.M., Mandryk, R.L., **Scott, S.D.** (2000). The EDGE of Face-to-Face Collaborative Technology. In *CSCW 2000: ACM Conf. on Computer-Supported Cooperative Work: Workshop on Shared Environments to Support Face-to-Face Collaboration*, December 2000, Philadelphia.

3.2.7   Conference Workshop Organization

135. Wallace, J.R., Houben, S., Anslow, C., Lucero, A., Rogers, Y., **Scott, S.D.** (2017). The Disappearing Tabletop: Social and Technical Challenges for Cross-Surface Collaboration. *Workshop at ISS 2017: ACM Conf. on Interactive Surfaces & Spaces*, October 2017, Brighton, UK.

136. Fischer, J., Porcheron, M., Lucero, A., Quigley, A., **Scott, S.**, Ciolfi, L., Rooksby, J., Memarovic, N. (2016). Collocated Interaction: New Challenges in 'Same Time, Same Place' Research, *Workshop at CSCW 2016: ACM Conference on Computer-Supported Cooperative Work and Social Computing*, February/March 2016, San Francisco, CA.

137. **Scott, S.D.** Wallace, J., Hancock, M, Nacenta, M., Graham, N. (2015). Supporting "Local Remote" Collaboration: Applying and Adapting Remote Group Awareness Techniques to Co-located Settings, *Workshop at CSCW 2015: ACM Conference on Computer-Supported Cooperative Work and Social Computing*, March 2015, Vancouver, BC.

138. **Scott, S.D.**, Muller, M., Moran, T., Bardram, J., Nardi, B., Wu, M. (2006). Awareness in Activity-Centric Groupware Design, *Workshop at CSCW 2006: ACM Conference on Computer-Supported Cooperative Work*, November 2006, Banff, AB.

139. Inkpen, K.M., Mandryk, R.L., Morris DiMicco, J., **Scott, S.D.** (2004). Methodologies for Evaluating Collaboration Behavior in Co-Located Environments, Workshop at CSCW 2004: ACM Conference on Computer-Supported Cooperative Work, November 2004, Chicago, IL, USA.

140. **Scott, S.D.**, Grant, K., Carpendale, S., Inkpen, K., Mandryk, R., Winograd, T. (2002). Co-located Tabletop Collaboration: Technologies and Directions. *Workshop at CSCW 2002: ACM Conf. on Computer-Supported Cooperative Work*, November 2002, New Orleans, LA.

141. Tandler, P., Magerkurth, C., Carpendale, S., Inkpen, K., **Scott, S.D.** (2002). Collaboration with Interactive Walls and Tables. *Workshop at UBICOMP 2002: Conference on Ubiquitous Computing*, September/October 2002, Göteborg, Sweden.

142. Inkpen, K., Mandryk, R., **Scott, S.D.**, Greenberg, S., Zanella, A. (2000). Shared Environments to Support Face-to-Face Collaboration. *Workshop at CSCW 2000: ACM Conference on Computer-Supported Cooperative Work*, December 2000, Philadelphia, PA.

3.2.8 Technical Reports

143. **Scott, S.D.**, Abbas, Z.J., Ellid, F., Dykhne, E.H., Islam, M.M., Ayad, A., Kacmorova, K., Tulpan, D., Gong, M. (2024). Systematic literature review of vision-based approaches to outdoor livestock monitoring with lessons from wildlife studies, arXiv preprint arXiv:2410.05041.

144. Satsangi, A., **Scott, S.D.**, Chaturvedi, R. (2024). Analysing Social Support in K-Pop Fandoms on Social Media Using Topic Modelling and Large Language Models. Report CSL2024-02, School of Computer Science, University of Guelph, Guelph, Canada.

145. Dykhne, E.-H., **Scott, S.D.** (2020). Systematic Literature Review on the Application of Machine Vision to Outdoor Livestock Monitoring. Report CSL2020-01, School of Computer Science, University of Guelph, Guelph, Canada.

146. Bassey, A., **Scott, S.D.** (2019). Using Smart Fabrics to Automate Bio-Monitoring Show-Jumping Horses for Training Improvements. Report CSL2019-01, School of Computer Science, University of Guelph, Guelph, Canada.

147. Marsh, K., & **Scott, S.D.** (2018). Identifying opportunities for emerging technologies to monitor cattle health and welfare in outdoor farm habitats. Report CSL2018-02, Collaborative Systems Lab, University of Guelph, Guelph, Canada

148. Abu Adas, D., & **Scott, S.D.** (2018). Technical Report Analyzing Various Tracking Techniques. Report CSL2018-01, Collaborative Systems Lab, University of Guelph, Guelph, Canada.

149. Bakelaar, J., & **Scott, S.D.** (2017). Opportunities to Develop Smart Farming Technologies to Address Animal Welfare Concerns: Review of the Technology Literature (Report CSL2017-02). Collaborative Systems Lab, University of Guelph, Guelph, ON.

150. Camacho, A., & **Scott, S.D.** (2017). Opportunities to Develop Smart Farming Technologies to Address Animal Welfare Concerns: Review of the Animal Welfare Literature (Report CSL2017-01). Collaborative Systems Lab, University of Guelph, Guelph, ON.

151. **Scott, S.D.**, Besacier, G., McClelland, P., Tournet, J., Goyal, N. and Cento, F. (2015). Cross-Device Content Transfer in Table-Centric Multi-Surface Environments. Technical Report CSL2015-01, Collaborative Systems Lab, University of Waterloo, Waterloo, ON.

152. **Scott, S.D.**, Allavena, A., Cerar, K., McClelland, P., Cheung, V., Jajalla, D. (2010). A Multi-User Tabletop Interface to Support Collaborative Decision-Making involving Dynamic Geospatial Data. Report CSL2010-02, Collaborative Systems Lab, University of Waterloo, Waterloo, ON.

153. **Scott, S.D.** & Allevena, A. (2010). Investigation of a Prototype Naval Planning Tool for Tabletop Computing Research: Final Report, Report CR 2010-055, DRDC-Atlantic, Halifax, NS.

154. **Scott, S.D.** & Cummings, M.L. (2007). An Experimental Platform for Investigating Decision and Collaboration Technologies in Time Sensitive Mission Control Operations. Report HAL2007-04, Humans & Automation Lab, MIT, Cambridge, MA.

155. Isenberg, T., Nix, S., Schwarz, M., Miede, A., **Scott, S.D.**, Carpendale, S. (2007). Mobile Spatial Tools for Fluid Interaction. Report 2007-872-24. Dept. of Computer Science, University of Calgary, Calgary, AB.

156. Wan, J., **Scott, S.D.**, Cummings, M.L. (2007). Assisting Interruption Recovery in Mission Control Operations. Report HAL2007-03, Humans & Automation Lab, MIT, Cambridge, MA.

157. Almirao, F.M., da Silva, F.B., **Scott, S.D.**, and Cummings, M.L. (2007). Designing Decision and Collaboration Support Technology for Operators in Multi-UAV Operations Teams. Report HAL2007-02, Humans & Automation Lab, MIT, Cambridge, MA.

158. **Scott, S.D.** & Cummings, M.L. (2006). Cognitive Task Analysis for the LCS Operator. Report HAL2006-01, Humans & Automation Lab, MIT, Cambridge, MA.

159. **Scott, S.D.**, Carpendale, M.S.T., Inkpen, K.M. (2004). Exploring Casual Tabletop Interactions. Report 2004-742-07, Dept. of Computer Science, University of Calgary.

3.2.9 Invited Conference Papers and Seminars

160. **Scott, S.D.** (2008). Assisting Collaborative Decision Making in Complex Environments. *Proceedings of the Int'l Conf. on Applied Human Factors and Ergonomics (CD Proceedings)*, July 14-17, 2008, Las Vegas, NV.

161. **Scott, S.D.** (2006). Real-Time Decision Support in the Face of Uncertainty, Invited seminar at IDGA 4th Annual Sensor-To-Shooter Conference, September 25-27, 2006, Washington, DC.

3.2.10 Invited Presentations & Keynotes

1. **Theory Informed and Inspired Design for Collaborative Systems,** InnoVis Symposium, Simon Fraser University, Burnaby, BC, July 2025.

2. **It Takes Courage to Pursue a New Path in Academia,** Research Methods in Computer Science Graduate Course (virtual), University of Calgary, Calgary, AB, November 2023.

3. **How K-pop Saved My Life & Turned into HCI Research,** Computer Science Seminar, Simon Fraser University, Burnaby, BC, July 2023.

4. **User-Centred Design of Ubiquitous Computing Technologies: From Interactive Furniture to Farm Robots,** Computer Science Seminar, Colorado State University, Fort Collins, CO, USA, December 2022.

5. **User-Centred Design of Ubiquitous Computing Technologies: From Interactive Furniture to Farm Robots,** Computer Science Seminar, Western University, London, ON, October 2022.

6. **Ubiquitous Computing in Farm Contexts: Supporting Human- and Animal-Computer Interactions on Livestock Farms,** Computer Science Seminar (virtual), Dalhousie University, Halifax, NS, October 2021.

7. *Award Recipient, Presenter, and Panel Speaker:* **Lasting Impact Award Session,** 23rd ACM Conference on Computer-Supported Cooperative Work and Social Computing, October 17-21, 2020, held virtually.

8. *Invited Speaker:* **Opportunities for User-Centred Design Approaches to Improve the Design of "Smart" Farm Technologies,** Invited Speaker at the 54th Graphics Interface Conference, Kingston, ON, May 28-31, 2019 *Note, I had to cancel my talk due to a death in the family.*

9. *Keynote Talk: (Gender) Inclusivity in the School of Computer Science (at Guelph),* Inclusivity in STEM Workshop, Guelph Women in Computer Science Club event, Guelph, ON, March 2019.

10. *Panel Speaker*: **Future Directions for Interactive Surfaces and Spaces,**
ISS 2017: ACM Conference on Interactive Surfaces and Spaces, Brighton, UK, October 2017.

11. *Panel Speaker*: **Large Scale Successes: Winning Strategies for Big Classes,**
Teaching & Learning Innovations Conference - Enhancing Teaching and Learning: The Evolution of the Lecture, University of Guelph, Guelph, ON, May 2017.

12. **Collaborative Systems Lab: From Supporting People to Supporting Animals (and their Handlers) in "Smart" Spaces,**
NSERC CREATE CLUE Seminar, Carleton University, Ottawa, ON, August 2017.

13. **Collaborative Systems Lab: Human-Computer Interaction, Interaction Design, and Visual Analytics for Enhanced Collaboration,**
Inbox Marketing, Guelph, ON, April 2017.

14. **Supporting Collaborative and Social Interactions with Large, Interactive Surfaces,**
Google-Guelph Research Exchange, Google, Kitchener, ON, February 2017.

15. **Theories and Applications of Social Science for Interactive Surface Computers,**
Computer Science Seminar, Technical University of Munich, Garching, Germany, October 2016.

16. **Supporting Collaborative and Social Interactions with Large, Interactive Surfaces,**
Computer Science Seminar, University of Guelph, Guelph, ON, April 2016.

17. **Using Tabletop Games to Examine Surface Computing Interface Design Challenges,** Computer Science Seminar, University of Sherbrooke, Sherbrooke, QC, May 2015.

18. **Using Tabletop Games to Examine Surface Computing Interface Design Challenges,** Computer Science Seminar, Queen's University, Kingston, ON, May 2015

19. **Using Games to Examine (Tabletop) Surface Computing Interface Design Challenges,** Computer Science Seminar, University of Calgary, Calgary, AB, March 2015

20. *Keynote Talk:* **Theories and Applications of Social Science for Interactive Surfaces,** Workshop on Collaboration Meets Interaction Surfaces (CMIS), held with ACM Conference on Interactive Tabletops and Surfaces, November 16, 2014, Dresden, Germany, November 2014

21. **Human-Computer Interaction and User Interface Concepts for Naval Battle Management and Command and Control,** Defence Research & Development Canada (DRDC), Valcartier, QC, August 2014.

22. **Visualizing and Modeling Arctic Sea Ice,** GRAND-MEOPAR Ocean Visualization Workshop, University of British Columbia, Vancouver, BC, August 2014.

23. **HEAP: Hydrocarbon Energy Analytics Project,** GRAND-Sustainability Project Meeting, University of Toronto, Toronto, ON, July 2014.

24. **Let's Play: Exploring Interface Design Challenges of Digital Tabletop using Games,** Computer Science Seminar, Carleton University, Ottawa, ON, January 2014.

25. **Let's Play: Exploring Interaction Design Challenges of Digital Tabletop using Games,** Computer Science Seminar, University of New Brunswick, Fredericton, NB, December 2013.

26. **User-Aware Devices: How Do We Gracefully Manage Imperfect Automation?** *Dagstuhl Seminar* on Proxemics in HCI, Schloss Dagstuhl, Wadern Germany, November 2013.

27. **Tabletop Gaming as a Context for Exploring Design Challenges in Digital Tabletops,** Computer Science Seminar, University of Saskatchewan, Saskatoon, SK, January 2013.

28. **Bridging the Gap Between Personal and Shared Surface Computing Devices,** Handheld Technology Forum (HHTF), Research in Motion (RIM), Waterloo, ON, November 2011.

29. *Keynote Talk:* **Exploring the Potential of Surface Computing in Complex Task Environments,** Industry Day, NSERC SurfNet Annual Workshop, University of Calgary, Calgary, AB, July 2011.

30. **Collaborative Tabletop Interfaces to Support Complex Task Environments,** Computer Science Colloquium, University of Central Florida, Orlando, FL, March 2011.

31. **Surface Computing Interfaces to Support Collaborative Decision-Making in Complex Task Environments,** User Interface Colloquium, University of Magdeburg, Germany, October 2010.

32. **Collaborative Systems Laboratory Research Overview,** UbiSoft, Québec, QC, September 2010.

33. **Investigation of a Prototype Naval Planning Tool for Tabletop Computing Research,** DRDC Future Technology Watch Showcase, CANSEC 2010, Ottawa, ON, June 2010.

34. **Next Generation Digital Tabletop Interfaces: Moving Beyond Photosharing,** User Experience (UX) Group of Waterloo Region, Waterloo, ON, March 2010.

35. *"Inspiration Agent" Keynote Talk:* **Digital Tabletop Gaming,** GeoEduc3D Workshop (GEOIDE NCE), Laval University, Québec, QC, February, 2010.

36. **Next Generation Digital Tabletop Interfaces: Moving Beyond Photosharing,** CapCHI: Special Interest Group – Computer Human Interaction, Ottawa, ON, December 2009.

37. **Collaborative Large-Screen Display Systems in Complex, Dynamic Task Environments,** Raytheon Canada, Waterloo, ON, July 2009.

38. **Collaborative Large-Screen Display Systems in Complex, Dynamic Task Environments,** Upper Austria University of Applied Sciences, Hagenberg, Austria, October 2008.

39. **Supporting Collaborative Work Practices in Digital Tabletop System Design,** Department of Computer Science, University of Calgary, Calgary, AB, May 2008.

40. **Collaborative Large-Screen Display Systems for Mission Control Operations,** Defence Research and Development Canada (DRDC) - Toronto, Toronto, ON, April 2008.

41. **Leveraging Established Work Practices in Digital Tabletop System Design,** HCI Research Seminar, University of Illinois at Urbana-Champaign, Urbana, IL, September 2007.

42. **Leveraging Established Work Practices in Digital Tabletop System Design,** Multimedia and Collaboration Research Group, The MITRE Corp., Bedford, MA, May 2007.

43. **Leveraging Established Task and Social Practices in Ubiquitous Technology Design,** HCI Seminar, MIT Computer Science & Artificial Intelligence Lab, Cambridge, MA, April 2007.

44. **Decision and Collaboration Support for Time-Critical Unmanned Vehicle Operations** (w/ M. Cummings), Department of Computer Science, University of Calgary, Calgary, AB, March 2007.

45. **Improving Collaboration in Unmanned Aerial Vehicle Operations,** CDL Systems, Calgary, AB, March 2007.

46. **Activity Awareness in Unmanned Aerial Vehicle Operations,** IBM T.J. Watson Lab, Collaborative User Experience Group, Cambridge, MA, March 2007.

47. **Collaborative Time-Sensitive Targeting,** Institute of Simulation and Training, University of Central Florida, Orlando, FL, February 2006.

48. **Supporting Collaboration in Time-Sensitive Operations,** Charles River Analytics, Cambridge, MA, December 2005.

49. **Supporting Human Decision-Making in Time-Critical Environments,** CMC Electronics, Ottawa, ON, July 2005.

50. **Supporting Human Decision-Making in Time-Critical Environments,** Defence Research & Development Canada (DRDC), Toronto, ON, July 2005.

51. **Supporting Human Decision-Making in Time-Critical Environments,** Mathematics & Computing Technology Lab, Boeing Phantom Works, Bellevue, WA, June 2005.

52. **Supporting Human Decision-Making in Time-Critical Environments,** Department of Psychology, Wright State University, Dayton, OH, May 2005.

53. **Collaborative Time-Sensitive Operations** (w/ M. Cummings), Air Force Research Lab, Wright Patterson Air Force Base, Dayton, OH, May 2005.

54. **Territoriality in Collaborative Tabletop Workspaces,** IBM T.J. Watson Lab, Collaborative User Experience group, Cambridge, MA, August 2004.

55. **Territoriality in Collaborative Tabletop Workspaces,** MIT Computer Science Artificial Intelligence Lab, Cambridge, MA, August 2004.

3.2.11 Supervised/Co-Supervised Student Theses

1. Abbas, Z.J. (2025). *The Pluralistic Nature of Emotion: Human and Machine Interpretations of Textual Emotional Content*, M.Sc. Thesis, School of Computer Science, University of Guelph.

2. Porwal, V. (2025). *Multi-Modal AI for Land Viability Assessment in Digital Soil Mapping*, M.Sc. Thesis, School of Computer Science, University of Guelph.

3. Farhad, H. (2024). *Understanding The Impact of Accuracy and Subtitle Availability on Comprehension: An Investigation Through Viewer Studies*, M.Sc. Thesis, School of Computer Science, University of Guelph.

4. Homaeian, L. (2022). *Interaction Design for Mixed-Focus Collaboration in Cross-Device Environments.* Ph.D. Thesis, Systems Design Engineering, University of Waterloo, Ontario, Canada.

5. Pafla, M. (2020). *Research Through Design of Human-AI Collaboration.* M.A.Sc. Thesis, Systems Design Engineering, University of Waterloo, Ontario, Canada.

6. Islam, M.M. (2020). *Exploring the Effects of Precision Livestock Farming Notification Mechanisms on Dairy Farmers*. M.Sc. Thesis, Computer Science, University of Guelph, Guelph, Ontario, Canada.

7. Makinde, A. (2020). *Investigating Perceptions, Motivations, and Challenges in the Adoption of Precision Livestock Farming in the Beef Industry*. M.Sc. Thesis, Computer Science, University of Guelph, Guelph, Ontario, Canada.

8. Ghare, M. (2017). *Investigating the Impact of Proximity and Visual Conation Modes on Enhancing Engagement with Public Large Interactive Displays*, M.A.Sc. Thesis, Systems Design Engineering, University of Waterloo, Ontario, Canada.

9. Chang, Y.-L. Betty (2016). *Supporting Situation Awareness and Workspace Awareness in Co-located Collaborative Systems Involving Dynamic Data*. Ph.D. Dissertation, Systems Design Engineering, University of Waterloo, Waterloo, Ontario, Canada.

10. Cheung, V. (2016). *Increasing Passersby Engagement with Public Large Interactive Surfaces*. Ph.D. Dissertation, Systems Design Engineering, University of Waterloo, Waterloo, Ontario, Canada

11. Varona-Marin, D. (2016). *The Lifecycle of a Whiteboard Photo: Post-meeting Usage of Whiteboard Content Captured with Mobile Devices.* M.A.Sc. Thesis, Systems Design Engineering, University of Waterloo, Waterloo, Ontario, Canada.

12. Goyal, Nippun (2016). *Investigating Data Exploration Techniques Involving Map Based Geotagged Data in a Collaborative Sensemaking Environment.* M.A.Sc. Thesis, Systems Design Engineering, University of Waterloo, Waterloo, Ontario, Canada.

13. McClelland, Phillip J. (2013). *Bridging Private and Shared Interaction Surfaces in Collocated Groupware*. M.A.Sc. Thesis, Systems Design Engineering, University of Waterloo, Waterloo, Ontario, Canada.

14. Hajizadehgashti (Gashti), Sepinood (2012). *Investigating the impact of table size on external cognition in collaborative problem-solving tabletop activities*. M.A.Sc. Thesis, Systems Design Engineering, University of Waterloo, Waterloo, Ontario, Canada.

15. Wallace, James R. (2012). *The Impact of Shared and Personal Devices on Collaborative Process and Performance*. Ph.D. Dissertation, Systems Design Engineering, University of Waterloo, Waterloo, Ontario, Canada.

16. Seto, A. Mindy (2012). *Designing Discoverable Digital Tabletop Menus for Public Settings*. M.A.Sc. Thesis, Systems Design Engineering, University of Waterloo, Waterloo, Ontario, Canada.

17. Cerar, Katherine (2011). *Examining the Impact of Increasing Location-Based Information Fidelity on Command Center Decision-Making*. M.A.Sc. Thesis, Systems Design Engineering, University of Waterloo, Waterloo, Ontario, Canada.

18. Sasangohar, Farzan (2009). *Improving Interruption Recovery in Human-Supervisory Control (HSC)*. M.A.Sc. Thesis, Systems Design Engineering, University of Waterloo, Waterloo, Ontario, Canada.

19. McKay, Paul (2009). *Design of Collaborative Systems for Modern Cockpits*. M.A.Sc. Thesis, Systems Design Engineering, University of Waterloo, Waterloo, Ontario, Canada.

20. Wan, Jordan (2007). *Interruption recovery tool for team supervision in time sensitive command and control environments*. M.Eng. Thesis, Electric Engineering & Computer Science, Massachusetts Institute of Technology, Cambridge, MA, USA.

3.3 RESEARCH AWARDS & FUNDING

3.3.1 Research Grants and Contracts

PI & Collaborators	Title & Agency	Amount	Years Held
S.D. Scott	Visual programming for public engagement in natural resource management *MITACS Business Strategy (with Nature Analytics, Mississauga, ON)*	$25,000	2024-2025
R. Chaturvedi (lead), S.D. Scott, B. Giguere	Exploring the use of machine learning to identify social support among global fandom members connected through social media *UofG's CARE-AI Seed Fund AI Innovation Grant*	$10,000	2023-2025
S.D. Scott	Image-based Automated Monitoring of Livestock in Outdoor Habitats *CARE-AI Innovation Grant*	$5,000	2021-2022
M. Hancock (lead), S.D. Scott	IMMERSe – Identifying Questions for Game-Based Learning through Deep Learning *MITAS Accelerate (with Axonify, Waterloo, ON)*	$45,000	2019-2020
S.D. Scott (lead), A. Hamilton-Wright, R. Chaturvedi	Investigating inclusive curriculum and student support services in computer science *UofG's Physical Sciences and Engineering Education Research Institute (PSEER) Grant*	$10,000	2018-2019
S.D. Scott	Improving the Effectiveness of Co-located Collaboration Technologies *NSERC Discovery Grant*	$360,000	2017-2027
S.D. Scott	Improving the Effectiveness of Co-located Collaboration Technologies *NSERC Discovery Grant Accelerator Supplement*	$120,000	2017-2021
J. Wallace, S.D. Scott	Visualizing Factors Contributing to Antimicrobial Resistance *Public Health Canada Contract*	$9,186	2017
S.D. Scott	Start-up Grant *University of Guelph*	$60,000	2016
J. Wallace, S.D. Scott, P. Stolee	Interactive Data Exploration and Analysis (IDEA) System *CFI Leader's Opportunity Fund/ORF-SIF*	$70,000	2017-2018
R.Mandryk (lead), S.D. Scott and 9 others	SWaGUR: Saskatchewan-Waterloo Games User Research *NSERC Collaborative Research and Training Experience (CREATE)*	$1,650,000	2016-2022
S.D. Scott (lead), C. Burns, N. Randall	IMMERSe- To and from the whiteboard: Supporting whiteboard transitions in a design workflow *MITAS Accelerate (2 internships) with SMART Technologies (Calgary, AB)*	$30,000	2015-2016
F. Maurer (lead), S.D. Scott	Hydrocarbon Energy Analytics Project (HEAP) *GRAND NCE Project*	$24,000	2014-2015
S.D. Scott (lead), M. Hancock, N. Randall	IMMERSe – Supporting Awareness and Encouraging Collaboration in Bring-Your-Own-Device Classroom Environments *MITAS Accelerate (2 internships) with SMART Technologies (Calgary, AB)*	$30,000	2014-2015

PI & Collaborators	Title & Agency	Amount	Years Held
S.D. Scott	Designing Multi-Surface User Interfaces for Naval Planning and Decision Support Tools NSERC Engage with Menya Solutions (Sherbrooke, QC)	$25,000	2014-2015
S.D. Scott (lead), M. Hancock	Experimental Design and User Study of EA Gaming Concepts *Electronic Arts Research Contract*	$34,615	2014
S.D. Scott (lead), with 5 others.	Leif: A Multicultural Exploration into Research and Education for Surface Computing *HRSDC: Canada-EU Transatlantic Exchange Partnership (TEP) Grant*	$200,000 (EU partners funded separately)	2010-2013
N. Randall, S.D. Scott, C. DiMarco	WatGAME: Waterloo Games Analysis and Monitoring Environment *CFI Leader's Opportunity Fund & Ontario Research Fund (ORF-SIF)*	$200,000	2013-2014
S.D. Scott	Individual and Collaborative Benefits of Interactive Large-Screen Displays *NSERC Discovery Grant*	$110,000	2012-2017
N. Randall (lead), S.D. Scott and 11 others	IMMERSe: The Interactive & Multi-Modal Experience Research Syndicate *SSHRC Partnership Grant*	$2,549,960	2012-2018
F. Maurer (lead), S.D. Scott, and 11 others	NSERC digital surface software application network (SurfNet) *NSERC Strategic Networks Grant*	$5,000,000	2010-2015
S.D. Scott	Exploring Industrial Opportunities for Digital Tabletop Gaming *NSERC Interaction Grant*	$4,500	2010
D. McKay (PI, CMC Electronics), J. Histon, S.D. Scott	Virtual Social Networking DRDC Research Contract	$313,332	2009-2011
S.D. Scott	Investigation of a Prototype Naval Planning Tool for Tabletop Research DRDC Research Contract	$19,775	2009
S.D. Scott	Experimental Platform for Developing Interactive Surface Computers to Support Complex, Time-critical Teamwork NSERC RTI (Equipment) Grant	$65,236	2009
D. McKay (PI, CMC Electronics), S.D. Scott	Developing an experimental platform for experiments on distributed teams DRDC Research Contract	$90,000	2007-2008
S.D. Scott	Advanced interface technologies for interactive multi-user displays NSERC Discovery Grant	$110,000	2007-2012
S.D. Scott	Start-up Grant University of Waterloo	$75,000	2007

3.3.2 External Graduate / Research Student Support

Student	Award / Scholarship & Agency	Amount	Years Held
S. Tenedero	NSERC Undergraduate Student Research Assistant	$6,000	2025
K. Garg	NSERC Undergraduate Student Research Assistant	$6,000	2024
K. Kacmarova	Ontario Graduate Scholarship (OGS)- Master's	$15,000	2022-2023
A. Makinde	Ontario Graduate Scholarship (OGS)- Master's (Int'l)	$15,000	2019-2020
A. Makinde	Food From Thought Research Assistantship *"Food from Thought" Canada's First Research Excellence Fund*	$17,500	2018-2019
L. Homaeian	Ontario Graduate Scholarship (OGS)-Doctoral	$15,000	2020-2021
L. Homaeian	NSERC PGS-D	$63,000	2017-2020
K. Marsh	NSERC Undergraduate Student Research Assistant	$5,000	2018
J. Harris	NSERC PGS-D	$63,000	2014-2016
C. Wong	NSERC Undergraduate Student Research Assistant	$5,000	2015
Y.-L.B.Chang	NSERC PGS-D	$63,000	2012-2014
Q. Feng	NSERC Undergraduate Student Research Assistant	$5,000	2014
M. Mengual	LEIF Canada-EU Exchange Award *European Education, A/V, and Cultural Executive Agency*	€5000 (~$6600 Cdn)	2013
J. Tournet	LEIF Canada-EU Exchange Award *European Education, A/V, and Cultural Executive Agency*	€5000 (~$6600 Cdn)	2012-2013
D. Lindlbauer	LEIF Canada-EU Exchange Award *European Education, A/V, and Cultural Executive Agency*	€5000 (~$6600 Cdn)	2012
A. Ion	LEIF Canada-EU Exchange Award *European Education, A/V, and Cultural Executive Agency*	€5000 (~$6600 Cdn)	2012
M. Alqahtani	King Abdullah Scholarship Program *Saudi Arabian Cultural Bureau*	$25,060[*]	2012[*]
	([*]delegate supervisor during this period)		
J.R. Wallace	NSERC CGS-D	$105,000	2009-2012
A.M. Seto	NSERC IPS *Industrial partner: Infusion Development*	$42,000	2009-2011
F. Sasangohar	Ontario Graduate Scholarship (OGS)-Master's	$15,000	2008-2009
P. McKay	NSERC IPS *Industrial partner: CMC Electronics*	$42,000	2007-2009

4 TEACHING ACTIVITIES

4.1 TEACHING CONTEXTUAL STATEMENT

Over my 18 years as a faculty member and 2 years as a postdoctoral fellow, I have made strong contributions to classroom teaching, course development, and research training throughout my career. I have successfully graduated students at all levels.

Classroom Teaching, Curriculum Development, and Academic Program Design and Delivery
I have taught a total of 17 unique courses across both undergraduate and graduate levels, with a total enrollment of 2200 students across courses. I have taught courses in introductory programming, intermediate software design and engineering, user-centred design methods, human-computer interaction, collaborative systems design, capstone project courses, independent (directed studies) projects, and advanced reading courses on surface computing, precision-livestock technology, and social computing.

I also have significant experience in curriculum development, both in designing new courses and refining existing courses. I aim to continually improve my courses based on student feedback and advances in technology and pedagogical practices. As a member of the software engineering teaching group, I assisted in a recent redesign of the Software Engineering program curriculum. As part of the SoCS leadership team, I co-led retreats on addressing teaching challenges due to increased class sizes to improve student learning and faculty workload.

Research and Independent Project Supervision
I have supervised students at undergraduate, graduate, and post-doctoral levels and have a strong record of publishing with my trainees in high-quality, internationally recognized peer-reviewed venues. I spend considerable time and energy on recruiting and developing young research talent. I actively seek out promising students in my courses for URA positions and independent projects to expose them to research; many of these students then pursue Master's and PhD degrees. I have carefully and deliberately established an environment and culture that provides a comprehensive, interdisciplinary learning environment for students and research staff who work with me.

I subscribe deeply to the "mentorship" approach to highly qualified personnel (HQP) supervision. I typically meet weekly one-on-one with each of my student and staff, together with their co-supervisors if applicable. I meet weekly or bi-weekly with research and design project groups I supervise, depending on the stage of their projects. I also partner junior students (URAs, co-op students, and new Master's students) under the day-to-day supervision of senior HQP to ensure they receive ongoing research mentorship, and to give senior HQP opportunities to develop supervisory skills. I have established strategic collaborations *on campus, across Canada,* and *internationally* to expose my HQP to a broad range of complementary skills and knowledge to broaden their research capabilities. These collaborations have led to successful formation of multiple national and international research networks and long-lasting research communities that significantly enhance research training and professional development opportunities.

I have been very fortunate to attract high-quality graduate students and postdocs; ten were awarded NSERC or OGS scholarships, four completed Mitacs internships, and one was awarded a "Food from Thought" Canada's First Research Excellence Fund scholarship. Seven of my trainees have successfully secured faculty positions, some are pursuing advanced training elsewhere, and the remaining trainees have successfully secured positions in the high-tech industry in roles such as Program Manager, User-Experience Researcher, Interaction Designer, and Senior Product Designer, Senior Software Engineer.

My commitment to HQP training was recognized with the *2022 Undergraduate Student Supervision Award* in the College of Engineering and Physical Science at Guelph.

4.2 COURSES TAUGHT – UNIVERSITY OF GUELPH (2016 – PRESENT)

Course Information	Terms taught	No. Students
CIS 3250: SOFTWARE DESIGN III (UNDERGRADUATE, REQUIRED COURSE)		
University of Guelph, School of Computer Science	Fall 2017	82
	Fall 2018	76
Intermediate software design course. Core concepts include software project	Fall 2019	50
management, configuration management, communication and teamwork, software	Fall 2020	96
design tools. Students complete team-based software assignments.	Fall 2022	55
	Fall 2023	105
	Fall 2024	63
CIS 3760: SOFTWARE ENGINEERING (UNDERGRADUATE, REQUIRED COURSE)		
University of Guelph, School of Computer Science	Winter 2017	116
	Winter 2018	114
Intermediate software engineering methods course. Core concepts include software	Winter 2019	67
design and modeling, objected-oriented software design, teamwork, and agile	Winter 2020	48
development. Students complete a major team-based software design project.	Winter 2021	64
CIS 4300: HUMAN-COMPUTER INTERACTION (UNDERGRADUATE, REQUIRED & ELECTIVE COURSE)		
University of Guelph, School of Computer Science	Fall 2019	80
Introductory human-computer interaction course. Core concepts include user-centric data collection methods (e.g. interviews, focus groups), design conception and evaluation, prototyping, and user studies and field studies.		
CIS 4250: SOFTWARE DESIGN V (UNDERGRADUATE, REQUIRED COURSE)		
University of Guelph, School of Computer Science	Winter 2023	43
	Winter 2025	61
4th year capstone design course for Software Engineering majors. Students complete a open-ended team-based software design project to demonstrate application of skills and knowledge gained throughout their undergraduate program.		
CIS 6650/6170: HUMAN-COMPUTER INTERACTION (GRAD COURSE)		
University of Guelph, School of Computer Science	Winter 2019	5
	Winter 2023	5
Graduate level course on human-computer interaction. Introduces graduate students in technical programs to the principles and methods used in HCI research. Students complete a major project that includes a literature review and technology evaluation.		
CIS 6660: TOPICS IN COMPUTER SCIENCE (GRAD COURSE)		
University of Guelph, School of Computer Science	Summer 2019 (Precision Livestock Farming)	2
This is a graduate-level reading course that examines the state of the art of a specific field in computer science, or field that	Summer 2023 (Explainable AI)	1
intersects with computer science. Students complete a major literature review of a relevant, unique topic area in the given field.	Winter 2025 (Collaborative and Social Computing Design)	2

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4.3 COURSES TAUGHT – UNIVERSITY OF WATERLOO (2007 - 2016)

Course Information	Terms taught	No. Students
SYDE 121: DIGITAL COMPUTATION (UNDERGRADUATE, REQUIRED COURSE)		
University of Waterloo, Systems Design Engineering	Fall 2012	94
	Fall 2013	108
Introduction to programming course. Main topics include computer systems, problem solving, structured programming, arrays, matrices and pointers, algorithm design, data structures, and introduction to object-oriented programming. C++ is used for in-class examples and weekly programming assignments.	Fall 2014	85
	Fall 2015	90
SYDE 202: SYSTEMS DESIGN ENGINEERING SEMINAR (UNDERGRADUATE, CORE SEMINAR COURSE, NON-CREDIT COURSE)		
University of Waterloo, Systems Design Engineering	Fall 2011	90
2nd Year seminar. Curriculum varies by instructor and class interests.	Fall 2012	86

I focused on giving seminars and bringing in guest speakers relevant to the students' current career and academic progress, including:
- *International exchange coordinators*
- *Coordinators of popular Engineering Options (similar to "minor concentrations" in other fields)*
- *Research talks by faculty members*
- *Staff from Engineering Counseling Services to discuss stress and time management skills*
- *Guest speakers from Engineers Without Borders and industry*

Course Information	Terms taught	No. Students
SYDE 322: SOFTWARE DESIGN (UNDERGRADUATE, TECHNICAL ELECTIVE)		
University of Waterloo, Systems Design Engineering	Winter 2013	24
Software engineering methods course. Core concepts include software design and modeling using UML, change management, team coordination, objected-oriented software design and development, software lifecycles, agile development, and cloud configuration management. Students complete a team-based course project.	Winter 2014	19
SYDE 348: USER-CENTRED DESIGN METHODS (UNDERGRADUATE, TECHNICAL ELECTIVE)		
University of Waterloo, Systems Design Engineering	Winter 2008	27
	Winter 2009	28
Human-computer interaction methods course, focused on iterative, user-centred design process. Core concepts include requirements methods (e.g. interviews, focus groups), design conception and evaluation, prototyping, and user and field studies. Students complete a team-based, course project.	Winter 2010	45
	Winter 2013	50
	Winter 2014[†]	41

[†]*Co-taught with C. MacGregor. I organized and co-evaluated course projects & advised on curriculum changes.*

Course Information	Terms taught	No. Students
SYDE 461/462: SYDE DESIGN WORKSHOP 2&3 (UNDERGRADUATE, REQUIRED CORE COURSES)		
University of Waterloo, Systems Design Engineering	Fall 2014 (461)[†]	61
4th year capstone design course. Students complete a substantial open-ended design project which involves teamwork and project management, and demonstrates application of skills and knowledge gained throughout their undergraduate program. The project spans two terms.	Fall 2015 (461)	69
	Winter 2016 (462)	69

[†]*Co-taught with C. MacGregor. I was main project coordinator and lab instructor. I coordinated and ran the panel examinations.*

Course Information	Terms taught	No. Students
SYDE 643: COLLABORATIVE SYSTEMS DESIGN (GRADUATE COURSE) (FORMERLY 740-9: TOPICS IN HUMAN SYSTEMS: COLLABORATIVE SYSTEMS DESIGN)		
University of Waterloo, Systems Design Engineering	Winter 2008	4
	Fall 2009[*]	8
Advanced human-computer interaction course on the design of collaborative computing systems. Core concepts include collaboration theories and requirements, quantitative and qualitative research and data analysis methods, crowd-based research, and collaboration technology examples. Students complete a major team-based project.	Fall 2010	9
	Fall 2011	10
	Winter 2014	5
SYDE 740-14: TOPICS IN HUMAN SYSTEMS: SURFACE COMPUTING SYSTEMS (GRAD COURSE)		
University of Waterloo, Systems Design Engineering	Spring 2013	2
Advanced human-computer interaction reading course on large-format surface computing systems. Course surveys literature across psychology, sociology, architecture, industrial design, computer science and engineering to demonstrate the breadth of design considerations for large-scale interactive surfaces. Students complete a major project.	Spring 2017	1
DM530-08: INTERACTIVE ENVIRONMENTS: COLLABORATIVE SYSTEMS DESIGN (GRAD COURSE)		
Upper Austria University of Applied Sciences (Hagenberg, Austria), Media Technology and Design/Digital Media	Fall 2008	30
Week-long condensed course based on SYDE 643 curriculum, as a module in a Masters-level course on Interactive Environments offered by Prof. Michael Haller.		
16.499: COMPUTER SUPPORTED COOPERATIVE WORK (GRADUATE COURSE)		
Massachusetts Institute of Technology (MIT), Aeronautics and Astronautics	Fall 2005[*]	4
Advanced human factors topics course on the design of collaborative computing systems. Course emphasized the study of collaboration from an interdisciplinary perspective and the derivation of system design criteria. Students completed a major project.	Winter 2007[*]	6

[*]*Co-taught with M. Cummings. I was the main course instructor and curriculum designer.*

4.4 INVITED GUEST LECTURES & INVITED TALKS (INTERNAL UNIVERSITY EVENTS)

DATE AND LECTURE/TALK DESCRIPTION

Nov 2024 **CIS 4300** – *Human-Computer Interaction,* "Addressing the 'Loneliness Epidemic' Fostering Human Connectedness in Online Multilingual and Multicultural Contexts"

Oct 2024 **Diverse Voices Shaping the Digital Future,** *2024 Tremaine Visiting Speaker Series for Women in Science Panel Discussion*, Panelist

Oct 2023 **Life's Balancing Act: Navigating Success as a Woman in STEM,** *2023 Tremaine Visiting Speaker Series for Women in Science Panel Discussion*, Panelist

Nov 2022 **CIS 1250** – *Software Design I*, "Conflict Management and Managing Difficult Conversations"

Sep 2021 **CCubed Student Conference, CS Prof Talks -** *"It Takes Courage to Pursue a New Path in Academia",* Invited Speaker / Panelist

Mar 2019 **Guelph Women in Computing Inclusivity Workshop -** *"Inclusivity in SoCS",* Keynote Speaker

Nov 2018 **CIS 4300** – *Human-Computer Interaction, "Collaborative Systems Lab Research Overview"*

Oct 2018 **Academic Career Development Course, CEPS: Faculty Interviews**, Panelist

Mar 2016 **Centre for Teaching Excellence: Documenting Your Teaching for Tenure**, Panelist

Feb 2016 **Women in Engineering Parental Leave Panel**, Panelist

Apr 2014 **Women in Engineering Developing a Research Group/Grad Supervision Panel**, Panelist

Mar 2014 **Women in Engineering Parental Leave Panel**, Panelist

Mar 2014 **WaterlUX (Waterloo User Experience) Club**, "Designing Digital Tabletops using Games"

Mar 2014 **COGSCI 600** – Cognitive Science Seminar, "Digital Tabletop System Design"

Mar 2013 **Women in Engineering Maternity Leave Panel**, Panelist

Nov 2012 **WS 205** – Gender, Culture, and Technology, "Women in Engineering"

Sep 2011 **SYDE 543** – Cognitive Ergonomics (w/ P. McClelland), "Vigilance"

Nov 2010 **WS 205** – Gender, Culture, and Technology (w/ L. Farlow), "Women in Engineering"

Oct 2010 **VIP (Vision and Information Processing) Research Seminar**, "Surface Computing Systems"

Jul 2010 **UW Engineering Alumni Event Keynote** (Ontario Science Centre), "Surface Computing Systems"

Jul 2010 **COGSCI 600** – Cognitive Science Seminar, "Digital Tabletop System Design"

Jul 2010 **SYDE 162** – Introduction to Human Systems Engineering, "Digital Tabletop Systems Design"

Jun 2010 **Women in Engineering Academic Bootcamp**, "Negotiation"

Jan 2010 **Boundless Research Group**, "Leveraging Established Work Practices in Digital Tabletop Design"

Jul 2009 **SYDE 162** – Introduction to Human Systems Engineering, "Digital Tabletop Systems"

Feb 2009 **ESQ Tech Girl Workshop**, "Designing Easy and Fun to Use Interactive Computer Technology"

Mar 2008 **CS 490** – Info. Mgmt Systems, "Collaboration Support Systems in Modern Military Operations"

Jul 2008 **SYDE 142** – Introduction to Human Systems Engineering, "Digital Tabletop Systems"

Nov 2007 **SYDE 202** – Systems Design Engineering 2B Seminar, "Digital Tabletop Systems"

Jul 2007 **SYDE 142** – Introduction to Human Systems Engineering, "Digital Tabletop Systems"

4.5 HIGHLY QUALIFIED PERSONNEL (HQP) TRAINING AND MENTORSHIP
4.5.1 DETAILS OF STUDENT / POSTDOCTORAL ASSOCIATE SUPERVISION
(UofG: UNIVERSITY OF GUELPH, UW: UNIVERSITY OF WATERLOO)

POSTDOCTORAL ASSOCIATE SUPERVISION

2022-2023   Leila Homaeian, *Postdoctoral Associate, UofG*
Project: **Investigating Language Barriers and Social Support in Global K-pop Fandoms**

2018   Jan Adriaan Oberholzer, *Postdoctoral Associate, UofG*
Project: **Interactive Surfaces to Support Co-located Collaboration**

2011-2013   Guillaume Besacier, *Postdoctoral Associate, UW*
Project: **Development of Digital Tabletop Gaming Systems**

2010-2011   Nader Cheaib, *Postdoctoral Associate, UW*
Project: **Development of a Multi-Agency Collaboration and Coordination Hub**

GRADUATE THESIS SUPERVISION: PhD theses

2024-   Shan Yun Kuo, *PhD, UofG Computational Sciences* (Co-sup. w/ Y. Lin)
PhD Thesis: **Investigating How Live-streaming Platform Design Impacts User's Real-time Co-Experience and Commitment in Entertainment Contexts**

2016-2022   Leila Homaeian, *PhD, UW Systems Design Engineering* (Co-sup. w/ J. Wallace)
PhD Thesis: **Interaction Design for Mixed-Focus Collaboration in Cross-Device Environments**
* NSERC PGS-D awardee
* Ontario Graduate Scholarship (OGS)-D awardee

2018-2019*   Fanny Susilo, *PhD, UofG Computer Science* (Co-sup. w/ T. Devries) (Withdrew, personal reasons)
PhD Thesis: **Investigating the Usability of Automatic Milking Robots for Cows and Farms**

2013-2016*   John Harris, *PhD, UW Computer Science* (Co-sup. w/ M. Hancock)
PhD Thesis: **Asymmetric Collaborative Gaming**
* NSERC PGS-D awardee
* I switched to advisory committee member when I moved to UofG in 2016

2010-2016   Yu-Ling (Betty) Chang*, *PhD, UW Systems Design Engineering* (Co-sup. w/ M. Hancock)
PhD Thesis: **Supporting situation and workspace awareness in co-located collaborative systems involving dynamic data**
* NSERC PGS-D awardee & MITACS Accelerate intern

2010-2016   Victor Cheung, *PhD, UW Systems Design Engineering* (Co-sup. w/ E. Lank)
PhD Thesis: **Drawing attention and engaging interaction with public large interactive surfaces**

2007-2012   James (Jim) Wallace, *PhD, UW Systems Design Engineering* (Co-sup. w/ C. MacGregor)
PhD Thesis: **The impact of shared and personal devices on collaborative process and performance**
* NSERC CGS awardee

GRADUATE THESIS SUPERVISION: MASTER'S theses

2025-   Oliver Davies, *MSc, UofG Computer Science*
MSc Thesis: **Digital Platform Design and Parasocial Interaction: K-pop fan-idol engagement**

2024-   Mahek Patel, *MSc, UofG Computer Science*
MSc Thesis: **AI Chat Summaries for Multilingual Live Stream Contexts**

2023-2025   Vishvam Porwal, *MSc, UofG Computer Science* (Co-sup. w/ A. Biswas)
MSc Thesis: **Multi-Modal AI for Land Viability Assessment in Digital Soil Mapping**

2023-2025   Zayn Abbas, *MSc, UofG Computer Science*
MSc Thesis: **Pluralistic Nature of Emotion: Human and Machine Interpretations of Textual Emotional Content**
* MITACS Business Strategy intern

2022-2025   Kristina Kacmarova, *MSc, UofG Computer Science*   (Withdrew, personal reasons)
MSc Thesis: **Synthetic Data Generation for DL models in Precision Livestock Farming**

2022-2024   Hoodad Farhad, *MSc, UofG Computer Science*
MSc Thesis: **Impact of Accuracy and Subtitle Availability on Comprehension**

2018-2020   Marvin Pafla, *MASc, UW Systems Design Engineering* (Co-sup. w/ M. Hancock)
MASc Thesis: **Human-AI Collaboration through Language-Based Query Assistance**
* MITACS Accelerate intern

2018-2020   Muhammad Muhaiminul Islam, *MSc, UofG Computer Science*
MSc Thesis: **Effects of precision livestock farming notification mechanisms on dairy farmers**

2018-2020   Ayoola Makinde, *MSc, UofG Computer Science*
MSc Thesis: **Investigating experiences with precision livestock farming in the beef industry**
* Ontario Graduate Scholarship (OGS)-M awardee
* Food from Thought Research Assistantship awardee

2015-2017   Mojgan Ghare, *MASc, UW Systems Design Engineering*
MASc Thesis: **Exploring Proxemics Interactions in Public Large Interactive Surfaces**

2014-2016   Danniel Verona-Marin, *MASc, UW Systems Design Engineering*
MASc Thesis: **To-and-From the (Interactive) Whiteboard**
* MITACS Accelerate intern

2014-2015   Anastasia Kuzminykh, *MASc, UW Systems Design Engineering* (Co-sup. w/ E. Lank)
MASc Thesis: **Investigating the impact of private and shared spaces on cognition**

2013-2016   Nippun Goyal, *MASc, UW Systems Design Engineering*
MASc Thesis: **Facilitating collaborative data exploration in multi-surface environments**

2010-2013   Phillip McClelland, *MASc, UW Systems Design Engineering*
MASc Thesis: **Bridging private and shared interaction surfaces in collocated groupware**

2012-2013   Meshael Alqahtani, *MASc, UW Systems Design Engineering*   (Delegate supervisory time period)
MASc Thesis: **Managing Controller Interruptions in Working Awareness Interruption Tool**

2009-2012   Amanda (Mindy) Seto*, *MASc, UW Systems Design Engineering*
MASc Thesis: **Designing discoverable digital tabletop menus for public settings**
* NSERC IPS awardee

2008-2012   Sepinood Hajizadehgashti (Gashti), *MASc, UW Systems Design Engineering*
MASc Thesis: **Impact of table size on external cognition in problem-solving tabletop activities**

2009-2011   Katherine Cerar, *MASc, UW Systems Design Engineering*
MASc Thesis: **Impact of location information fidelity on command center decision-making**

2007-2009   Farzan Sasangohar*, *MASc, UW Systems Design Engineering*
MASc Thesis: **Improving interruption recovery in human-supervisory control**
* OGS Graduate Scholarship awardee

2007-2009   Paul McKay*, *MASc, UW Systems Design Engineering*
MASc Thesis: **Design of collaborative systems for modern cockpits**
* NSERC IPS awardee

GRADUATE RESEARCH ASSISTANTS / RESEARCH STAFF / VISITING STUDENTS / COOPS

Summer 2023   Vibhuti Baja, *Research Assistant*
Project: **Using ML to identify social support behaviour in Twitter-based global fandoms**

Fall 2020-
Fall 2021   Muhammad Muhaiminul Islam, *Research Assistant*
Project: **Human- and animal-centred design in precision livestock farming**

Fall 2019-
Winter 2020   Melissa Williams, *Research Assistant, Animal Biosciences Ph.D. Student*
Project: **Investigating Ontario beef farmer experiences with precision livestock technologies**

Fall 2019-
Winter 2020   Emily Conlin, *Research Assistant, Animal Biosciences Master's Student*
Project: **Investigating Ontario beef farmer experiences with precision livestock technologies**

Winter 2019-
Fall 2019   Nathan Chan, *Research Assistant*
Project: **Software development support on a multi-surface experimental platform**

Fall 2018-
Spring 2019   Bhavya Dhawan, *Research Assistant*
Project: **Investigating inclusive curriculum and student support in computer science**

Spring 2015   Bo Peng, *Research Assistant*
Project: **Investigating Software Plagiarism Tools and Techniques**

Fall 2013-
Spring 2014   Leila Homaeian, *Research Assistant*
Projects: **Automation and cooperative game play; User study of EA gaming concepts**

Winter 2013-
Winter 2014   Rebecca Langer, *Research Assistant* (Co-sup w/ M. Hancock)
Project: **Utilizing suspense and narrative in interface design**

Spring 2012   Alexandra Ion*, *Intern, from Upper Austria University of Applied Science, Austria*
Project**: Off-view visualization techniques for large geospatial situation displays**
* LEIF Canada-EU Academic Exchange Program awardee

Spring 2012   David Lindlbauer*, *Intern, from Upper Austria University of Applied Science, Austria*
Project**: Automatic perceptual-based grouping of sketch items on an interactive wall**
* LEIF Canada-EU Academic Exchange Program awardee

Winter 2009   Lin Chen, *Coop Research Assistant, UW Management Science MASc (Coop)*
Project: **Investigating the impact of table size on collaboration**

UNDERGRADUATE RESEARCH ASSISTANTS / COOPS (FULL-TIME)

Summer 2025   Simon Tenedero, *Coop Research Assistant, UofG Software Engineering*
Project: **Software development of a livestream social media research platform**
* NSERC USRA awardee

Summer 2025   Paola Bustos, *Intern, from Universidad Autónoma de San Luis Potosí, Mexico*
Project: **Software development of a livestream social media research platform**
* MITACS Globalinks Internship awardee

Summer 2025   Yevheniia Bazhmaieva, *Intern, from Taras Shevchenko National University of Kyiv, Ukraine.*
Project: **Software development of a livestream social media research platform**
* MITACS Globalinks Internship awardee

Summer 2024   Jonas Matulis, *Coop Research Assistant, UofG Software Engineering*
Project: **Software development of a livestream social media research platform**

Summer 2024   Peter Bertone, *Coop Research Assistant, UofG Software Engineering*
Project: **Software development of a livestream social media research platform**

Summer 2024   Krish Garg, *Coop Research Assistant, UofG Computer Science*
Project: **Using ML to Analyze Social Support withing Global Fandoms on Social Media**
* NSERC USRA awardee

Summer 2024	Aditi Satsangi, *Intern, from Dayalbagh Educational Institute, India* Project: **Using ML to Analyze Social Support withing Global Fandoms on Social Media** *** MITACS Globalinks Internship awardee**
Spring 2023	Mahek Patel, *Coop Research Assistant, UofG Software Engineering* Project: **Investigating Language Barriers experienced by Global K-pop Fans**
Spring 2022	Garrett Holmes, *Coop Research Assistant, UofG Computer Science, GIS minor* Project: **Vision-Based Techniques for Monitoring Livestock in Outdoor Habitats**
Spring 2021 Spring 2022	Zayn Abbas, *Coop Research Assistant, UofG Software Engineering* Project: **Vision-Based Techniques for Monitoring Livestock in Outdoor Habitats**
Spring 2021	Feerass Ellid, *Coop Research Assistant, UofG Computer Science* Project: **Literature Review of Vision-Based Techniques for Monitoring Livestock Outdoors**
Spring 2021	Rabia Qureshi, *Coop Research Assistant, UofG Software Engineering* Project: **Designing Social Media Campaign, 50th Anniversary, School of Computer Science**
Winter 2021	Nidhi, *Coop Research Assistant, UofG Computer Science* Project: **Digital Online Recruitment & Outreach Strategies for Computer Science**
Fall 2020	Crestena Khidhir, *Coop Research Assistant, UofG Computer Science* Project: **Digital Online Recruitment and Outreach Strategies for Computer Science**
Spring 2020	Eli-Henry Dykhne, *Coop Research Assistant, UofG Computer Science* Project: **Automated Vision-Based Techniques for Monitoring Livestock Outdoors**
Spring 2020	Mary Bergin, *Coop Research Assistant, UofG Computer Science* Project: **Digital Online Recruitment and Outreach Strategies for Computer Science**
Spring 2019	Anemmeabasi Bassey, *Coop Research Assistant, UofG Computer Science* Project: **Smart Fabrics to Monitor Health and Performance in Show Jumping Horses**
Spring 2018	Kassidy Marsh, *Coop Research Assistant, UofG Computer Science* Project: **Investigating Technological Solutions to Outdoor Cattle Monitoring** *** NSERC USRA awardee**
Winter/Spring 2017 & 2018	Marvin Pafla, *Coop Research Assistant, UofG Computer Science* Project: **Improving Interaction with Public Interactive Displays**
Spring 2017	Anetia Camacho, *Coop Research Assistant, UofG Animal Sciences* Project: **Investigating Technological Solutions to Animal Welfare Challenges**
Spring 2017	Jonas Bakelaar, *Coop Research Assistant, UofG Computer Science* Project: **Investigating Smart Farming Technologies**
Winter 2016	Quinton Millard, *Coop Research Assistant, UW Systems Design Engineering* Project: **Improving the TILT multi-surface selection control mechanism**
Spring 2015	Caroline Wong, *Coop Research Assistant, UW Psychology* Project: **Qualitative analysis of collaborative multi-surface command and control** *** NSERC USRA awardee**
Spring 2015	Raphael Cheng, *Coop Research Assistant, UW Computer Engineering* Project: **Prototyping a collaborative tabletop sea ice visual analysis environment**
Spring 2015	Demi Olagoke, *Coop Research Assistant, UW Software Engineering* Project: **Prototyping a collaborative tabletop sea ice visual analysis environment**
Fall 2014- Winter 2015	Marcus Osobase, *Coop Research Assistant, UW Software Engineering* Project: **Prototyping a collaborative tabletop sea ice visual analysis environment**
Fall 2014	Qi Feng (Edmund) Liu, *Coop Research Assistant, UW Software Engineering* Project: **Prototyping a collaborative tabletop sea ice visual analysis environment** *** NSERC USRA awardee**

Fall 2014	Jay Chilibecki, *Coop Research Assistant, UW Software Engineering* (Co-sup. with M. Hancock) Project: **Asymmetric Gaming with Microsoft's Illumishare Platform**
Spring 2014	Shrey Khosla, *Coop Research Assistant, UW Software Engineering* Project: **Developing proximity-based interaction with a large public display**
Winter 2014	Yang Chen, *Coop Research Assistant, UW Systems Design Engineering* Project: **Improving SurfBoard: a software toolkit for digital tabletop gaming**
Winter 2014	Frank Cento, *Coop Research Assistant, UW Systems Design Engineering* Project: **Investigating cross-device transfer between tabletops and tablets**
Spring 2013	Mylène Mengual*, *Intern, from TELECOM-Bretagne, France* Project**: Design of historical event timelines for digital tabletop board games** *** LEIF Canada-EU Academic Exchange Program awardee**
Fall 2012 - Spring 2013	Julie Tournet, *Intern, from TELECOM-Bretagne, France* Project**: Design of cross-device transfer techniques for digital tabletop card games** *** LEIF Canada-EU Academic Exchange Program awardee**
Spring 2013	Brian Parfett, *Coop Research Assistant, UW Computer Science* Project: **Developing software toolkit for digital tabletop board gaming**
Winter 2013	Faizan Haque, *Coop Research Assistant, UW Systems Design Engineering* Project: **Designing touch-plus-pen digital tabletop computer system**
Winter 2013	Han Xin (William) Zhang, *Coop Research Assistant, UW Computer Science / Actuarial* Project: **Designing software toolkit for digital tabletop board gaming**
Winter 2010	Carla Midence, *Coop Research Assistant, UW Systems Design Engineering* Project: **Collaborative Systems Laboratory website redesign**
Fall 2009 - Winter 2010	Antoine Allavena, *Intern, from TELECOM-Bretagne, France* Project**: Investigation of a prototype tabletop naval planning interface**
Fall 2008 - Spring 2009	Khaled Tangao, *Research Intern, from TELECOM-Bretagne, France* Project: **Framework for developing geo-spatial tabletop applications**
Spring 2009	Phillip McClelland, *Coop Research Assistant, UW Systems Design Engineering* Project: **Development of the ASPECTS tabletop naval geospatial planning tool**
Spring 2009	Simon Whitmell, *Coop Research Assistant, UW Systems Design Engineering* Project: **Development of the ASPECTS tabletop naval geospatial planning tool**
Winter 2009	Eugene Lai, *Coop Research Assistant, UW Psychology* Project: **Investigating the role of large displays in multi-display environments**
Fall 2008	Majd Al-shihabi, *Coop Research Assistant, UW Systems Design Engineering* Project: **Feasibility assessment of tabletop software frameworks**
Spring 2008	Taryn Stutz, *Coop Research Assistant, UW Psychology* Project: **Examining effects of display configuration on collaboration**
Winter 2008	Patricia Enns, *Coop Research Assistant, UW Systems Design Engineering* Project: **Examining effects of display configuration on collaboration**
Fall 2006	Fernanda Borques da Silva, *Intern, Instituto Tecnologico de Aeronautica, Brazil* Project: **Design methodology for unmanned aerial vehicle (UAV) team coordination** Massachusetts Institute of Technology, Cambridge, MA, USA
Spring 2006	Jordan Wan, *MIT Undergraduate Research Opportunity Program* Project: **Developing team interfaces for autonomous UAV team operations**
Spring 2006	Scott Fisher, *MIT Undergraduate Research Opportunity Program* Project: **Developing team interfaces for autonomous UAV team operations**
Spring 2006	Carina Furusho, *MIT Intern, from Instituto Tecnologico de Aeronautica, Brazil* Project: **Designing teaming interfaces for autonomous UAV Team Operations**

Spring 2006	Alma Rico, *MIT Intern, from Instituto Tecnologico de Aeronautica, Brazil*
	Project: **Designing teaming interfaces for autonomous UAV Team Operations**
Winter 2006	Fernanda Almirao, *MIT Intern, from Instituto Tecnologico de Aeronautica, Brazil*
	Project: **Designing collaborative decision support for operators in multi-UAV teams**
Spring 2005	Anunaya Pandey, *MIT Undergraduate Research Opportunity Program*
	Project: **Supporting collaboration in command and control (C2) environments**

UNDERGRADUATE RESEARCH ASSISTANTS (PART-TIME)

Winter 2022	Weam Ayad, *UofG Biomedical Sciences*
	Project: **Literature Review of Vision-Based Techniques for Monitoring Livestock Outdoors**
Fall 2021	Zayn Abbas, *UofG Software Engineering*
Winter 2022	Project: **Literature Review of Vision-Based Techniques for Monitoring Livestock Outdoors**
Spring 2018	Ian Kemp, *UW Management Engineering*
Winter 2019	Project: **Technical support on a multi-surface experimental platform**
Winter 2018	Dema Abu Adas, *Coop Research Assistant, UofG Computer Science*
	Project: **Investigating Vision-Based Precision Livestock Farming Solutions**
Spring 2016	Ethan Liang, *UW Systems Design Engineering*
	Project: **Software Modifications for a Public Large Interactive Surface system**
Winter 2016	Adena Lin, *UW Psychology*
	Project: **Improving the TILT multi-surface selection control mechanism**
Winter 2016	Philos Tsai, *UW Systems Design Engineering*
	Project: **Improving the TILT multi-surface selection control mechanism**
Fall 2014-	Brigjet Lee, *UW Psychology*
Spring 2015	Project: **Qualitative analysis of collaborative tabletop game play**
Spring 2014	Kevin Michael, *UW Systems Design Engineering*
	Project: **Design of tabletop multi-touch interfaces**
Fall 2013-	Joanne Leong, *UW Systems Design Engineering*
Winter 2014	Project: **Design of animated interface components for multi-touch interfaces**
Spring 2013	Kevin Lau, *UW Systems Design Engineering*
	Project: **Design of animated interface components for multi-touch interfaces**
Spring 2013	Elizabeth Yang, *UW Systems Design Engineering*
	Project: **Design of animated interface components for multi-touch interfaces**
Winter 2013	Christopher Ngan, *UW Systems Design Engineering*
	Project: **Design of animated interface components for multi-touch interfaces**
Fall 2012-	Jessica Ooi, *UW Systems Design Engineering*
Winter 2013	Project: **Design of multi-touch interaction technique for layout applications**
Fall 2012	Parthipan Thayanithy, *UW Mechatronics Engineering*
	Project: **Redesign of laser light plane digital tabletop system**
Fall 2011	Marta Borowska, *UW English Language and Literature*
	Project: **Multimedia design for LEIF Canada-EU academic exchange program**
Fall 2011-	Rabia Aslam, *UW Systems Design Engineering*
Winter 2012	Project: **Developing card-based tabletop game interactions**
Fall 2011	Michael Adler, *UW Systems Design Engineering*
	Project: **Developing tabletop app for showcasing research projects**
Fall 2011	Sara Greenberg, *UW Systems Design Engineering*
	Project: **Extending the tabletop widgets toolkit**

Fall 2010	Justin Lin, *UW Software Engineering*
	Project**: Development of digital tabletop system menu user interfaces**
Fall 2010	Siu (Vincent) Wen, *UW Computer Science*
	Project**: Feasibility study of digital mapping interface technologies**
Fall 2010	Calvin Chan, *UW Systems Design Engineering*
	Project**: Design of user interface concepts for surface-based mapping interfaces**
Spring 2009	Nassir Tajdin, *UW Systems Design Engineering*
	Project**: Interface design for extending the CRISTAL tabletop system**
Spring 2009	Steven Ramkumar, *UW Electrical and Computing Engineering*
	Project**: Interface design for extending the CRISTAL tabletop system**
Winter 2009	Sang-Hun Lee, *UW Software Engineering*
	Project**: Developing personal workspace extension for tabletop interface currents**
Winter 2009	Gary Abbott, *UW Systems Design Engineering*
	Project**: Designing interface menus for modifying tabletop interface currents**
Winter 2009	Arthur Chow, *UW Systems Design Engineering*
	Project**: Designing scenarios for collaborative naval planning operations**
Fall 2008	Deon Jajalla, *UW Systems Design Engineering*
	Project**: Investigating large displays in collaborative multi-display environments**
Jan 2008 & Fall 2008	Jeff Glaister, *UW Systems Design Engineering*
	Project**: Designing tabletop interfaces**

UNDERGRADUATE CAPSTONE / INDEPENDENT PROJECT SUPERVISION

Fall 2023	Mahek Patel, *UofG Software Engineering*
	Haashir Butt, *UofG Computer Science*
	Project**: Augmenting livestream social media interfaces to enhance K-pop fan experience**
Fall 2022 & Winter 2023	Zayn Abbas, *UofG Software Engineering*
	Pham (Sky) Truong, *UofG Computer Science*
	Project**: Machine Translation, limitations and opportunities to support global K-pop fans**
Winter 2021	Dhruvi Shah, Martina Tawedrous, *UofG Computer Science*
	Ellen Brown, *UofG Software Engineering*
	Project**: Examining Zoom's ability to support high-quality interpersonal interactions**
Winter 2020	Dhruvi Shah, Connor Geddes, *UofG Computer Science*
	Project**: Interactive Kiosk for the School of Computer Science**
Winter 2019	Michael Truong, Kushal Pandya, *UofG Computer Science*
	Project**: PaintAR: Using Augmented Reality for Interior Design**
Fall 2018 & Winter 2019	Kassidy Marsh, *UofG Computer Science*
	Project**: (1) Identifying opportunities for emerging tech to monitor cattle health & welfare; (2) Using accelerometers to detect lying behaviour of dairy cattle in free-stall barns**
Spring 2018	Naj Khatami, *UofG Computer Science*
	Project**: Waterloo Collegiate Institute Course Listings: A New Android Application**
Winter 2018	Betty Zhao, *UofG Engineering Systems and Computing*
	Project**: Emerging Tech for Monitoring Animal Welfare in Animal Farming**
Fall 2013 - Winter 2014	Anthony Chuang, Bhavik Vyas, Jin Sung Kang, Qiming Yang, Rahul Udasi, *UW Mechatronics Engineering*
	Project**: Collabr: Interactive Collaborative Table**

Fall 2012 - Winter 2013	Jessica Ooi, Anthony Go, Jane Miranda, Leslie Ng, *UW Systems Design Engineering* Project**: How to Train Your Dragon: The Interactive Experience**
Fall 2012 - Winter 2013	Khojasteh Dumasia, Mishaal Mohammed Mohiuddin, Vibhu Arulsothynathan, *UW Systems Design Engineering* Project**: Enhancing the Retail Experience**
Fall 2012 - Winter 2013	Louie Mansour, Laurence Pike, Dorion de Gobeo, Nolan Finkelstein, *UW Systems Design Eng.* Project**: Design of a Digital Pen**
Fall 2011	Brad Morris, Rahil Jivani, Michael Baglole, *UW Mechatronics Engineering* Project**: Design of a Mechanized Board Game**
Fall 2010	Alexandra Joyce, Katrina Koo, *UW Systems Design Engineering* Project: **Design of Online Financial System for Volunteer-based Organizations**
Fall 2010	Mohsen Hadianfard, *UW Software Engineering* Project: **Design of Mobile GPS Services Application**
Fall 2009- Winter 2010	Paul Shin, UW Software Engineering Project: **Implementation of a Transit Tracker for Android-powered Mobile Devices**
Fall 2009- Winter 2010	Phillip McClelland, Simon Whitmell, *UW Systems Design Engineering* Project: **Digital Conversion of Pax Romana Wargame for a Tabletop Computer**
Fall 2009- Winter 2010	Arthur Chow, Gartheepan Rasaratnam, T. Vincent Chang, *UW Systems Design Engineering* Project: **Tabletop Interface for Furniture Planning and Inventory Discovery**
Fall 2009- Winter 2010	Jenny Lu, Gobind Johar, Bill Tong, *UW Systems Design Engineering* Project: **A Remote Tutoring System to Improve Educational Access in Developing Nations**
Fall 2009- Winter 2010	Lisa Du, Marek Komor, Dave Kincade, Han Xu, *UW Electrical and Computer Engineering* Project: **Development of a large multi-touch tabletop system**
Fall 2008 - Winter 2009	Wayne Giang, Sunny Liang, Amita Rampal, *UW Systems Design Engineering* Project: **Naval command collaboration**
Fall 2008 - Winter 2009	Melina McLarty, Katie Cerar, *UW Systems Design Engineering* Project: **System to facilitate collaborative television watching**
Fall 2008 - Winter 2009	Amanda Schulze, Amanda (Mindy) Seto, *UW Systems Design Engineering* Project: **Synergized interactive magazine reading**
Winter 2008	Melina McLarty, Katie Cerar, Wayne Giang, Amanda Schulze, *UW Systems Design Engineering* Project: **Improved theme park line up experience**
Fall 2007 - Winter 2008	Akhil Chugh, Harpreet Aujla, David Horne, *UW Systems Design Engineering* Project: **Sports social networking website**
Fall 2007 - Winter 2008	Graeme Roche, Phil Newman, Chris Pellett, *UW Systems Design Engineering* Project: **Facebook improvements**

EXTERNAL THESIS EXAMINER / READER

March 2024   Narges Ashtari, Ph.D. Student, Department of Computer Science, Simon Fraser University, Burnaby, BC
PhD Thesis: **Understanding and Supporting the Process of Learning about Augmented Reality and Virtual Reality Creation among New Creators**

Jan 2019   Jie (Lewis) Liu, Ph.D. Student, Faculty of Information Technology, Monash University, Melbourne, Australia
PhD Thesis: **Effective User Interfaces for Human-in-the-loop Optimisation**

Oct 2016   Andreas Dippon, Ph.D. Student, Department of Informatics, Technische Universität München (Technical University of Munich), Garching, Germany
PhD Thesis: **Natural Interaction in Multi-Device Environments**

Aug 2016   Ting (Brendan) Chen, *Ph.D. Student*, Faculty of Robotics and Autonomous Systems, Queensland University of Technology, Australia
PhD Thesis: **Management of Multiple Heterogeneous Unmanned Aerial Vehicles Through Capability Transparency**

Dec 2013   Roberto Martinez-Maldonado, *Ph.D. Student*, School of Information Technologies, The University of Sydney, Australia
PhD Thesis: **Analysing, Visualising and Supporting Collaborative Learning using Interactive Tabletops**

Jan 2013   Aaron Genest, *Ph.D. Student*, Department of Computer Science, University of Saskatchewan, Saskatoon, SK
PhD Thesis: **Representing Deixis in Surface-Based Geocollaborations**

Mar 2011   Paul Varcholik, *Ph.D. Student*, Department of Modeling & Simulation, College of Engineering & Computer Science, University of Central Florida, Orlando, FL, USA
PhD Thesis: **Multi-Touch for General-Purpose Computing**

Sep 2009   Seth Hunter, *Master's Student*, MIT Media Lab, Massachusetts Institute of Technology
Master's Thesis: **MemTable, Contextual Memory in Group Workspaces**

Aug 2008   David Smith, *Ph.D. Student*, Department of Computer Science, Queen's University
PhD Thesis: **Raptor: Sketching Video Games With a Tabletop Computer**

5   PROFESSIONAL DEVELOPMENT ACTIVITIES

5.1   PROFESSIONAL MEMBERSHIPS

2000-	Member, Academic Computing Machinery (ACM) and ACM SIGCHI (Special Interest Group on Computer Human Interaction)
2019-	Member, Interaction Design Foundation (IxDF)
2018-	ACM Emerging Interest Group (EIG) on Smart Connected Communities
2013-2017	Professional Engineers of Ontario

5.2   INFORMAL PROFESSIONAL DEVELOPMENT ACTIVITIES

I regularly participate in informal discussions about research, teaching, and graduate student mentorship with colleagues to continually evolve and improve my leadership skills. I regularly discuss:

- designing and fairly assessing team-based technical / software design projects,
- effective ways to deliver and assess human factors engineering and HCI course topics
- supervising human factors/HCI graduate students and managing research staff
- engaging and interacting with junior students and managing large classes
- promoting inclusivity in the classroom and in the research context

Due to my interest in equity, diversity, and inclusion (EDI), I also participated in an informal **"Instructional Inclusivity" Community of Practice** cross-campus group that included faculty, staff, and graduate students interested in creating inclusive classroom experiences. This CoP was paused due to the pandemic.

5.3   FORMAL PROFESSIONAL DEVELOPMENT ACTIVITIES

Nov 2025	*How to Boost Your Productivity with AI Tools*, 1 hour, LinkedInLearning (virtual)
Sept 2025	*Artificial Intelligence Case Studies in Different Industries*, 1 hour, LinkedInLearning (virtual)
Sept 2025	*AI Literacy for Business Leaders*, 1 hour, LinkedInLearning (virtual)
Sept 2025	*Getting People to Say Yes through the Power of Persuasion; Persuasion at Work: Communicate with Influence; The 10 Essentials of Influence and Persuasion*, 2 hours, LinkedInLearning (virtual)
Aug 2025	*Navigating Organizational Politics as a Senior Leader*, 1.5 hours, LinkedInLearning (virtual)
Aug 2025	*Holding Your Team Accountable*, 1 hour, LinkedInLearning (virtual)
July 2025	*Agentic AI Fundamentals: Architectures, Frameworks, and Applications*, 1.5 hours, LinkedInLearning (virtual)
May 2025	*Strategic Planning Foundations*, 1.5 hours, LinkedInLearning (virtual)
May 2025	*Conducting a SWOT Analysis*, 1 hour, LinkedInLearning (virtual)
Sept 2024	*Diversity, Inclusion, and Belonging*, 1 hour, LinkedInLearning (virtual)
Aug 2024	*DevOps Foundations*, 3.5 hours, LinkedInLearning (virtual)
July 2021	*Unconscious Bias in Award Adjudication*, 1 hour, UofG (virtual)
July 2021	*Leading with a Heavy Heart,* .5 hours, LinkedInLearning (virtual)
May 2021	*Inclusive Leadership and Collaboration: Applying Anti-Oppressive and Anti-Racism Lenses to Decision-Making and Building a Strong Departmental Culture*, 1 hour, UofG (virtual)
June 2021	*Artificial Intelligence Foundations: Machine Learning,* 1.5 hours, LinkedInLearning (virtual)
July 2020	*Drupal Website Development Training,* 3 hours, UofG (virtual)

June 2020	*Contract Cheating: What is it, and What can we do about it?* 1 hour, SFU (virtual)
June 2020	*Course Redesign Institute: Adapting your Assessments for Remote Teaching,* 2 days, UofG (virtual)
May 2020	*Microsoft Teams Live Event Training,* 3 hours, UofG (virtual)
Mar 2020	*CampusPress Website Development Training,* 2 hours, UofG
Feb 2020	*HeForShe Gender Equity Workshop,* 1 hour, UofG
Mar 2019	*PSEER Seminar: Barriers to Learning,* 1 hour, UofG
Feb 2019	*PSEER Seminar: Inclusivity in Computer Science,* 1 hour, UofG
Dec 2018	*PSEER Seminar: Gender Pronouns,* 1 hour, UofG
Oct 2018	*PSEER Seminar: Closing the Gender Gap in Engineering – Is it Possible?* 1 hour, UofG
May 2018	*Teaching and Learning Innovations Conference: Diversity and Inclusive Approaches Keynote Talk by Kyra Garson "Internationalization, Inclusion, and Intercultural Understanding? What are Students Learning?"* 1 hour, UofG
Jan 2018	*Faculty Search Committee Training: Avoiding Implicit Bias in Hiring,* 1.5 hrs, UofG
Jan 2018	*PSEER Seminar: Early Semester Testing in Mathematics and the Student Perspective,* 1 hour UofG
Nov 2017	*PSEER Seminar: Shifting Responsibilities: Using Peer Assessment in Engineering Design to Provide Effective Support & Meaningful Feedback in Large Classes,* 1 hour, UofG
Nov 2015	*Engineering Teaching Group: Using Student Models to Teach Mechanics*, 1 hour, UW
Oct 2015	*Engineering Teaching Group: Authentic Assessment to Foster Motivation, 1 hour, UW*
Sept 2015	*Workshop on Designing for Understanding, 1/2 day, Fluxible Conference, Kitchener*
June 2015	*Workshop on Renewing the HCI Curriculum in Canada, 1 day, Halifax, NS*
June 2015	*CTE Lunch and Learn Session on Piazza Online Q&A form for teaching*, 1 hour, UW
Nov 2013	*Engineering Teaching Group: Engaging Large Classes*, 2 hours, UW
Oct 2013	*Engineering Teaching Group: Minimizing Impact of Stereotype Threats*, 2 hours, UW
Feb 2013	*Engineering Teaching Group: Teaching Styles,* 2 hours, UW
Sept 2012	*CTE Workshop: LEARN Dropboxes and Rubrics,* 1.5 hours, UW
Sept 2012	*CTE Workshop: LEARN Quizzes,* 2.5 hours, UW
Aug 2012	*CTE Workshop: Getting Started with LEARN,* 2 hours, UW
Jan 2012	*CTE Workshop: Getting Started with LEARN,* 2 hours, UW
May 2009	*New Instructor Workshop: Engineering a Successful Teaching Experience*, 3 days, U of T
Dec 2008	*CTE Workshop: Course Design*, half-day, UW
Dec 2008	*CTE UW-ACE Instructor User Group Session*, 1 hour, UW
June 2008	*CTE Workshop: Using UW-ACE to help students prepare for class,* 2 hours, UW
June 2006	*Everyday Leadership*, 1 day, HR Training & Prof. Dev., MIT, Cambridge, MA
May 2006	*Transitioning to Management*, 2 days, HR Training & Prof. Dev., MIT, Cambridge, MA
Mar 2006	*Assertive Communication*, 1 day, HR Training & Prof. Dev., MIT, Cambridge, MA
Sept 2005	*Active Listening*, 2 days, HR Training & Prof. Dev., MIT, Cambridge, MA

6   SERVICE / ADMINISTRATION

6.1   UNIVERSITY SERVICE AT THE UNIVERSITY OF GUELPH

COLLEGE (FACULTY)	• **Executive Service Role:** Interim Dean, College of Computational, Mathematical, and Physical Sciences (2025 – present) • **Executive Service Role:** Chair, Ad hoc Committee for Computer Science, Mathematics & Statistics, Physics, and Chemistry. College restructuring discussions (2025) • CEPS (College of Engineering and Physical Sciences) Awards Committee (2020-2021) • SoCS Representative on the PSEER (Physical Sciences and Engineering Education Research Institute) Steering Committee, a CEPS research institute (2017-present)

SCHOOL of COMPUTER SCIENCE (SoCS)	• **Executive Service Role:** Interim Director, Master of Cybersecurity and Threat Intelligence Program, SoCS (2023 – 2024)
	• **Executive Service Role:** Associate Director, Graduate Studies, SoCS (2023 – 2025)
	• **Executive Service Role:** Assistant Director, SoCS (2020-2021, cycled off due to sabbatical), included the following portfolios:
	   • SoCS Student Awards Committee (Chair: Sept 2020 - Aug 2021)
	   • SoCS Outreach Committee (Chair: May 2020 - Aug 2021)
	• **Major Service Role:** Chair, SoCS Strategic Planning Committee (2018-2020)
	   • **Led 5-year Strategic Planning process for School**
	• SoCS Strategic Planning Committee (Member: 2016-2017, 2020-2021)
	• SoCS Graduate Curriculum Committee (2016-2020)
	• SoCS Graduate Curriculum Committee (2016-2020)
	• SoCS Internal NSERC Discovery Grant Reviewer (2017-2019, 2021)
	• SoCS Artificial Intelligence Faculty Search Committee (2019-2020)
	• SoCS Tenure & Promotion (and Merit) Committee (2017-2019)
	• SoCS Director's Search Committee (2018-2019)
	• SoCS Software Engineering Curriculum Committee (2017-2018)
	• SoCS Graduate Admissions Committee (2016-2018)
	• SoCS Faculty Writing Circle Lead Organizer (2016-2018)

UNIVERSITY	• Academic Inclusion Committee, Graduate and Research subcmte Chair (2018-2020)
COMMUNITY	• CodeMakers (2017) – co-organized/ran a 1 week programming camp for kids (ages 10-12) in partnership with UofG's Creative Encounters with Science.

6.2   UNIVERSITY SERVICE AT THE UNIVERSITY OF WATERLOO

DEPARTMENT	• Departmental Advancement (Fundraising) Committee • Departmental Graduate Studies Committee • Departmental NSERC/OGS Scholarships Committee • Departmental Advisory Committee on Appointments (Hiring) Committee • Departmental Chair Nominating Committee • Departmental Representative for Faculty Computing Committee • Departmental Representative for numerous outreach and recruiting events • Served on numerous PhD & Master's comprehensive and defence exams
FACULTY	• Engineering Faculty Advocate, HeForShe 10x10x10 IMPACT Initiative • Co-Chair, Faculty of Engineering Women in Engineering Committee • Chair for multiple PhD Comprehensive Exams • Faculty Mentor at various Women in Engineering outreach events, including Parental leave panels, Graduate supervision panels, Conference co-organizer

6.3 PROFESSIONAL SERVICE / ADMINISTRATION

Vice President:
- Canadian Human-Computer Communications Society (CHCCS), 2024-present

Conference Steering Cmte:
- ACM Conference on Interactive Surfaces and Spaces (ISS), 2015-2021

10-Year Impact Award Co-Chair / Cmte:
- 10-Year Impact Award Selection Committee for the ACM Conference on Interactive Surfaces and Spaces (ISS)
  - Committee Co-Chair ACM ISS 2022, Wellington, New Zealand
  - Committee Member ACM ISS 2018, Tokyo, Japan
  - Committee Member ACM ISS 2017, Brighton, UK

Grants & Major Research Awards Reviewer:
- NSERC Discovery Grant Evaluation Cmte, Computer Science (1507), 2022-2026
- NSERC Discovery Grant submission, 2012, 2017-2022
- NSERC Discovery Horizon Grant submission, 2024, 2025
- European Research Council (ERC), Consolidator Grant, 2025
- NSERC Arthur B. McDonald Fellowship nomination, 2024
- Universities Canada, Global Excellence Initiative, Killiam Prize nomination, 2024
- Austrian Science Fund (FWF), 2021
- MITACS Accelerate Grant submission, 2013, 2020, 2022
- NSERC Industrial Research Chair External Site Reviewer, 2018
- NSERC Strategic Projects submission, 2008, 2015
- Ontario MRI ORF-RE Grant submission 2017
- CFI-JELF Grant submission, 2016
- MITACS Accelerate Grant submission, 2013
- Dutch National Science Foundation submission, 2009
- DRDC Technology Investment Fund submission, 2008
- US National Science Foundation (NSF), CSCW submissions, 2008
- NSF Grant Selection Committee Member, CSCW Program, 2007

Technical Program Co-Chair:
- ACM Conference on Interactive Surfaces and Spaces (ISS), formerly ACM Conference on Interactive Tabletops and Surfaces and IEEE International Workshop on Tabletops and Interactive Surfaces (Tabletop) in:
  - 2007 (Newport, RI)
  - 2009 (Banff, AB)
  - 2018 (Tokyo, Japan)
  - 2019 (Daejeon, South Korea)

Guest Journal Editor:
- IEEE Computer Graphics & Applications, Vol. 26, No. 5 (Sept/Oct 2006)

Journal Editorial Boards & Program Committees (Conference reviewing in HCI follow similar processes to journal reviews)
- Associate Editor, Proceedings of the ACM – Human-Computer Interaction, 2025
- Associate Chair, ACM Conf. on Human Factors in Computing Systems (CHI), 2011, 2024, 2025
- Associate Chair, ACM Conf. on Interactive Surfaces and Spaces 2016, 2017
- Associate Chair, ACM Conf. on Interactive Tabletops and Surfaces 2013, 2014, 2015
- Associate Chair, ACM Conf. on Computer Supported Cooperative Work, 2017
- Associate Chair, ACM Group Conference, 2016
- Associate Chair, Euro. Conf. on Computer-Supported Cooperative Work, 2009

Other Conf. Organizing Roles:
- (Proceedings Chair) ACM Conference on Computer-Supported Cooperative Work, 2012
- (Notes Co-Chair) ACM Group Conference, 2009
- (Posters Co-Chair) ACM Group Conference, 2007

PROFESSIONAL SERVICE (CONT'D)

Book & Book Chapter Reviewer:	• *Reviewer,* Proposed book (with subsequent revisions) on Surface Computing, Morgan Kaufmann Publishers, 2009
	• *Reviewer*, 3 proposed chapters for book on Digital Tabletops, Springer, 2009

Journal Referee:
- ACM Transactions on Computer Human Interaction (ToCHI) (ACM)
- Computers and Electronics in Agriculture (Elsevier)
- Computers in Human Behaviour (Elsevier)
- Computer Supported Cooperative Work (Springer)
- Human-Computer Interaction (Taylor & Francis)
- IEEE Transactions on Systems, Man, and Cybernetics – Part B (Cybernetics)
- International Journal on Human-Computer Studies (Elsevier)
- Personal and Ubiquitous Computing (Springer)
- Software: Practice & Experience (Wiley)

Conference Referee:

Annual reviewer, human-computer interaction & collaborative systems conferences:
- ACM Conference on Human Factors in Computing Systems (CHI)
- ACM Conference on Computer-Supported Cooperative Work (CSCW)
- ACM Conference on Interactive Surfaces and Spaces (ISS (formerly ITS))

Occasional reviewer, HCI & collaborative systems conferences:
- ACM Annual Symposium on Computer-Human Interaction in Play (CHI Play)
- ACM International Symposium on Pervasive Displays (PerDis)
- ACM Joint Conference on Pervasive and Ubiquitous Computing (UbiComp)
- ACM Symposium on Engineering Interactive Computing Systems (EICS)
- ACM Symposium on User Interface Software and Technologies (UIST)
- European Conference on Precision Livestock Farming (EC-PLF)
- Graphics Interface: Conference on Graphics, Visualization & HCI (GI)
- Int'l Conference on Human-Computer Interaction with Mobile Devices (MobileHCI)

Workshop / Conference Organizer (in addition to Published Workshops listed in §3.3.8):
- SSHRC IMMERSe Partnership Workshop, Toronto, ON, May 2013
  (1-day event, internal research talks and strategic planning discussions)
- NSERC SurfNet Strategic Network Annual Workshop, Waterloo, ON, Sept 2012
  (2-day event, internal research talks & tutorials, and industry open house with live technology demos)
- MIT Humans and Technology Symposium, Cambridge, MA, Jan 2006
  (5-day event, invited research talks from experts in the field)
- Dalhousie Computer Science In-House Conference, Halifax, NS, Sept 2002
  (2-day event, graduate student research talks)