

Biography

Cosmin Munteanu is an Associate Professor at the Institute for Communication, Culture, Information, and Technology at University of Toronto Mississauga, and Director of the Technologies for Ageing Gracefully lab. His area of expertise is at the intersection of Human-Computer Interaction, Automatic Speech Recognition, Natural User Interfaces, Mobile Computing, Ethics, and Assistive Technologies, having dedicated the past almost three decades to investigating the human factors of interacting with information-rich media and intelligent technologies. His main research goals are to facilitate natural, meaningful, and safe interactions between people and digital media and devices. Cosmin's multidisciplinary interests include designing intelligent applications that improve access to information, support learning, and reduce digital marginalization, such as for older adults whose enjoyment of life and participation in society could be better supported by advances in interactive assistive technologies.

Professional Expertise and Interests**Human-Computer Interaction Research**

- Technologies to support older adults
- Digital marginalization and inclusion
- Human factors in natural language-based interfaces
- Conversational and voice interaction
- Multimodal interfaces
- Experimental design
- Mobile interaction
- Virtual reality
- Mixed reality and tangible interaction
- Educational applications for pervasive and mobile computing
- Intelligent assistive technologies for under-represented populations
- Usable privacy and security
- Ethics in Human-Computer Interaction research

Natural Language Processing and Artificial Intelligence Research

- Speech and language processing
- Dialogue systems and conversational interfaces
- Language modelling

Teaching in Higher Education

- Human-computer interaction and UX design

- Computers and society
- Ethics
- Natural language processing and automatic speech recognition
- Programming languages

Education

2009	PhD in Computer Science (University of Toronto, Canada)
2004	Master of Science in Computer Science (Department of Computer Science, University of Toronto, Canada)
2000	Master of Applied Science in Computer Engineering (Department of Computer and Software Engineering, Politehnica University of Timișoara, Romania)
1999	Diploma Engineer in Computer Science and Engineering (Department of Computer and Software Engineering, Politehnica University of Timișoara, Romania)

Academic affiliations

University of Toronto Mississauga, Institute of Communication, Culture, Information, and Technology (Associate Professor), since 2014

University of Toronto, Faculty of Information (Associate Professor), since 2014

University of Toronto, Department of Computer Science (Associate Professor – cross-appointed), since 2014

National Research Council (Research Officer), 2009 – 2014

University of New Brunswick (Research Associate) 2010 – 2014

University of Toronto (Adjunct Professor), 2011 – 2014

Professional and service roles

Technologies for Ageing Gracefully Lab, University of Toronto (Director), since 2015

School of Cities, University of Toronto (Affiliate Faculty), since 2019

ACM SIGCHI MobileHCI Steering Committee (Co-chair), since 2019

Conversational User Interfaces (CUI) Steering Committee (Co-chair), since 2019

ACM SIGCHI Ethics Committee (Member), since 2016

ACM SIGCHI MobileHCI Steering Committee (Member), since 2018




AGE-WELL Networks of Centres of Excellence, Project Lead, since 2016

AGE-WELL Networks of Centres of Excellence, Research Management Committee (Member), since 2016

Grants (as sole or lead PI)

- Resilience at the crossroads: a techno-feminist approach to intergenerational culture preservation through social storytelling and sense-making within displaced populations. 2020 – 2022. Canadian federal tri-council New Frontiers in Research Fund - Exploration (NFRF) grant. Lead PI (with Negin Dahya and Ishtiaque Ahmed as co-PIs). \$247,250.
- Inclusive Interactive Apps to Reduce Older Adults' Social Isolation and Digital Marginalization 2020 – 2024. AGE-WELL NCE Core Research Project. Lead PI, with co-PIs: Karyn Moffat (McGill), Joanna McGrenere (UBC), Willian Randall (STU). \$575,000
- Quality of Life at the End of Life. 2020 – 2024. CIHR AAL Grant. Sole PI (part of an international collaboration under the European Union AAL programme, with community and university partners in the EU). \$350,000
- Inclusive Interactive Apps for Older Adults. 2019 – 2020. AGE-WELL NCE Catalyst Award. Sole PI. \$27,000.
- A safer Internet for the socially-isolated and digitally-marginalized older adults. (Principal Applicant). 2017-2018. Mozilla Foundation Research Grant. Total Funding: \$32,000 (USD).
- Multimodal natural assistive interfaces to support reading, learning, and access to critical information. (Principal Applicant). 2016 – 2021. Natural Sciences and Engineering Research Council of Canada (NSERC) Discovery Grant. Total Funding: \$110,000.
- CONNECT-CREATE: Promoting Social Connectedness Through Collaborating on Digital Interactive Technologies for Older Adults (Co-applicant with Karyn Moffatt (McGill) and David Kaufman (SFU)). 2015 – 2020. Networks of Centres of Excellence (NCE) AGE-WELL Program. Total Funding: \$540,000
- Language Customization Tool to Simplify Health Information. (Co-applicant with Melissa Karagianakis, Heuristext). 2016 - 2017 Networks of Centres of Excellence (NCE) AGE-WELL Strategic Investment Program (SIP). Total Funding: \$25,000
- User-centred Information Visualization for Fintech. RBC Research Prize. 2017. (Co-applicant, principal Investigator: Gerald Penn, University of Toronto). Total funding: \$25,000
- Improving the online safety of older Canadian adults - a preliminary investigation. (Principal Applicant). 2016 – 2018. University of Toronto Connaught New Researcher Award. Total Funding: \$9,600.
- Ethical dilemmas during field studies of emerging and disruptive technologies – is our current state of knowledge adequate? (Principal Applicant). 2016 – 2017. Social Sciences and Humanities Research Council of Canada (SSHRC) Knowledge Synthesis. Total Funding: \$22,600.
- Increasing Older Adults' Online Safety - a Preliminary Investigation. (Principal Applicant). 2016 – 2017. University of Toronto Mississauga - Research and Scholarly Activity Fund. Total Funding: \$9,950.

Publications

Legend:  Since joining University of Toronto  Student first author  Award or mention

Books



Munteanu, C., Axtell, B., Kaufman, D., Hauscknecht, S. Digital Storytelling for Older Adults: Designing for Current and Future Practice. To appear (2021). Morgan & Claypool Publishers. Lecture series on Assistive, Rehabilitative, and Health-preserving Technologies.

Refereed Book Chapters and Articles in Collections



Akcayir G, Chen Z, Epp CD, Pandeliev V, **Munteanu C.** **Two Case Studies of Online Discussion Use in Computer Science Education: Deep vs. Shallow Integration and Recommendations.** In: *Handbook of Research on Online Discussion-Based Teaching Methods*. IGI Global; 2020. p. 409–34.



Munteanu, C., Axtell, B., Rafih, H., Liaqat, A., Aly, Y. Designing for Older Adults: Overcoming Barriers toward a Supportive, Safe, and Healthy Retirement. In O. Mitchell, ed., *The Disruptive Impact of FinTech on Retirement Systems*. Wharton School Pension Reform Council. University of Pennsylvania / Oxford University Press, 2019.



Munteanu, C., Sadownik, S. Field studies of assistive technologies for marginalized users: a Canadian ethics policy perspective. In B. Barbosa-Neves and F. Vetere, editors, *Ageing and Emerging Technologies: designing and evaluating emerging technologies for older adults*. Springer, 2019



Munteanu, C., Salah, A. Multimodal Technologies for Seniors: Challenges and Opportunities. In S. Oviatt, B. Schuller, P. Cohen, D. Sonntag, G. Potamianos, and A. Krueger, editors, *The Handbook of Multimodal-Multisensor Interfaces Volume 1: Foundations, User Modeling, and Common Modality Combinations*. Morgan Claypool Publishers (2017)

Refereed Full Archival Papers (Journals, CHI, and Journal-status Proceedings)



Liaqat, A., Axtell, B., **Munteanu, C.** **Participatory Design for Intergenerational Culture Exchange in Immigrant Families: How Collaborative Narration and Creation Fosters Democratic Engagement.** In the *Proceedings of the ACM on Human-Computer Interaction - CSCW*. 2021. p. 1 – 40.



Axtell, B., Munteanu, C. **Tea, Earl Grey, Hot: Designing Speech Interactions from the Imagined Ideal of Star Trek.** In *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems*. 2020. p. 1–22.



Sin. J., Franz, R., **Munteanu C,** Neves, B. **Digital Design Marginalization: New Perspectives on Designing Inclusive Interfaces.** In *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems*. 2020. p. 1–21.



Liaqat, A, **Munteanu, C. Leveraging Peer Support for Mature Immigrants Learning to Write in Informal Contexts.** In the *Proceedings of the ACM on Human-Computer Interaction - CSCW*. 2020 (**Diversity Award**)



Liaqat, A, **Munteanu, C, Demmans Epp, C. Collaborating with Mature English Language Learners' to Combine Peer and Automated Feedback: A User-Centered Approach to Designing Writing Support.** In the *International Journal of Artificial Intelligence in Education*. 2020 (Jul). p. 1–42.



Sin J, **Munteanu C. An empirically grounded sociotechnical perspective on designing virtual agents for older adults.** *Journal of Human-Computer Interaction*. 2020;1–30.



Murad C, **Munteanu C. Designing Voice Interfaces: Back to the (Curriculum) Basics.** In *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems*. 2020. p. 1–12.



Axtell B, **Munteanu C.** Back to Real Pictures: A Cross-generational Understanding of Users' Mental Models of Photo Cloud Storage. In *ACM Proceedings on Interactive, Mobile, Wearable and Ubiquitous Technologies – IMWUT (Journal of UbiComp)*. 2019;3(3):1–24.



Murad, C., **Munteanu, C. Revolution or Evolution? Speech Interaction and HCI Design Guidelines.** In the *IEEE Journal of Pervasive Computing*, 18(2):33–45, 2019. (**Best Paper Award**)



Clark, L., Pantidi, N., Cooney, O., Doyle, P., Garaialde, D., Edwards, J., Spillane, B., Murad, C., **Munteanu, C., Wade, V. and Cowan, B.R., What Makes a Good Conversation? Challenges in Designing Truly Conversational Agents.** In *Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems – CHI*, Glasgow, UK, May 2019. **Best of CHI Honourable Mention.**



Clark, L., Doyle, P., Garaialde, D., Gilmartin, E., Schlögl, S., Edlund, J., Aylett, M., Cabral, J., **Munteanu, C.** and Cowan, B. **The State of Speech in HCI: Trends, Themes and Challenges.** In *Interacting with Computers Journal*, Oxford University Press, 2019



Neves B., Franz R, **Munteanu C., Baecker R. Adoption and feasibility of a communication app to enhance social connectedness amongst frail institutionalized oldest old: an embedded case study.** In the *Journal of Information, Communication & Society*. 2018 Nov 11:1-9. Taylor & Francis.



Wu, A., **Munteanu, C. Understanding Older Users' Acceptance of Wearable Interfaces for Sensor-based Fall Risk Assessment.** In *Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems – CHI*, Montreal, Canada, April 2018



Robertson, S., **Munteanu, C., Penn, G. Designing Pronunciation Learning Tools: the Case for Interactivity against Over-Engineering.** In *Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems – CHI*, Montreal, Canada, April

2018



Munteanu, C., Molyneaux, H., Moncur, W., Romero, M., O'Donnell, S., Vines, J. Situational Ethics: Re-thinking approaches to formal ethics requirements for human-computer interaction. In Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems – CHI, Seoul, South Korea, April 2015
(Best of CHI Honourable Mention Award)



Neves, B., Franz, R., **Munteanu, C.**, Baecker, R., Ngo, M. “**My hand doesn’t listen to me!**”: adoption and evaluation of a communication technology for the ‘oldest old’. In Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems – CHI, Seoul, South Korea, April 2015

Munteanu, C., Molyneaux, H., Maitland, J., McDonald, D., Leung, R., Fournier, H., Lumsden, J., Hidden in plain sight: Low literacy adults in a developed country overcoming social and educational challenges through mobile learning support tools. In *the Journal of Personal and Ubiquitous Computing*, Springer-Verlag, 2014

Munteanu, C., Molyneaux, H., Maitland, J., McDonald, D., Leung, R., A Tale of Two Studies: Challenges in Field Research with Low-literacy Adult Learners in a Developed Country. In *Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems - CHI*, Austin, USA, May 2012

Munteanu, C., Penn, G., Zhu, X., Improving Automatic Speech Recognition for Lectures through Transformation-based Rules Learned from Minimal Data. In *Proceedings of the 47th Annual Meeting of the Association for Computational Linguistics – ACL*, Singapore, 2009

Munteanu, C., Baecker, R., and Penn, G., Collaborative Editing for Improved Usefulness and Usability of Transcript-Enhanced Webcasts, in *Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems - CHI*, Florence, Italy, April 2008



Munteanu, C., Baecker, R., Penn, G., Toms, E., and James, D., The Effect of Speech Recognition Accuracy Rates on the Usefulness and Usability of Webcast Archives, in *Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems - CHI*, Montreal, Canada, April 2006 (Best of CHI Honourable Mention Award)

Munteanu, C. and Penn, G., Optimizing Typed Feature Structure Grammar Parsing through Non-Statistical Indexing, in *Proceedings of the 42nd Association for Computational Linguistics Conference - ACL*, Barcelona, Spain, July 2004

Penn, G. and **Munteanu, C., A Tabulation-Based Parsing Method that Reduces Copying,** in *Proceedings of the 41st Association for Computational Linguistics Conference - ACL*, Sapporo, Japan, July 2003

Refereed Full Papers (Top-tier Archival Proceedings)



Sin. J., **Munteanu C.** VUI Influencers: **How the Media Portrays Voice User Interfaces for Older Adults.** In *Proceedings of the 3rd ACM In-cooperation International Conference on Conversational User Interfaces.* 2021.



Murad, C., **Munteanu, C.**, Clark, L., & Cowan, B. **Finding a New Voice: Transitioning Designers from GUI to VUI Design.** *Proceedings of the 3rd AXCM In-cooperation International Conference on Conversational User Interfaces.* 2021.



Robertson S, **Munteanu C**, Penn G. **FAB: The French Absolute Beginner Corpus for Pronunciation Training.** In: *Proceedings of The 12th Language Resources and Evaluation Conference.* 2020. p. 6613–20.



Conte S, **Munteanu C.** **Help! I'm Stuck, and there's no F1 Key on My Tablet!** In: *Proceedings of the 21st International Conference on Human-Computer Interaction with Mobile Devices and Services - MobileHCI.* 2019. p. 1–11.



Liaquat A, Akcayir G, Epp CD, **Munteanu C.** **Mature ELLs' Perceptions Towards Automated and Peer Writing Feedback.** In: *European Conference on Technology Enhanced Learning (EcTel).* Springer, Cham; 2019. p. 266–79.



Phirangee, K., Demmans Epp, C., Pandeliev, V, **Munteanu, C.** **Reflective Teaching Practice in Computer Science? A Tale of Two Instructors.** In Proceedings of the American Educational Research Association (AERA), 2019.



Liaquat, A., **Munteanu, C.** **Towards a Writing Analytics Framework for Adult English Language Learners.** In *Proceedings of the International Learning Analytics and Knowledge (LAK) Conference*, Sydney, Australia, March 2018. **Best of LAK Honourable Mention.**



Axtell, B., **Munteanu, C.**, Demmans Epp, C., Aly, Y., Rudzicz, F. **Touch-Supported Voice Recording to Facilitate Forced Alignment of Text and Speech in an E-Reading Interface.** In *Proceedings of the ACM Conference on Intelligent User Interfaces – IUI*, Tokyo, Japan, March 2018



Demmans Epp, C., **Munteanu, C.**, Axtell, B., Ravinthiran, K., Aly, Y., Mansimov, E. **Finger Tracking: Facilitating Non-Commercial Content Production for Mobile E-Reading Applications.** In *Proceedings of the ACM International Conference on Human-Computer Interaction with Mobile Devices and Services – MobileHCI*, Vienna, Austria, September 2017



Cook, S., Baecker, R., **Munteanu, C.**, Walker, A. **Towards technologically assisted mindfulness meditation practice in older adults: an analysis of difficulties faced and initial prototype of a neurofeedback solution.** In *Proceedings of the HCI International Conference (HCII) – invited paper.* Vancouver, Canada, May 2017.



Robertson, S., **Munteanu, C.**, Penn, G. **Pronunciation Error Detection for New Language Learners.** In *Proceedings of INTERSPEECH*, San Francisco, USA, September 2016

Favre, B., Cheung, K., Kazemian, S., Lee, A., Liu, Y, **Munteanu, C.**, Nenkova, A, Ochei, D, Penn, G., Tratz, S., Voss, C., Zeller, F., **Automatic human utility evaluation of ASR systems: does WER really predict performance?** In *Proceedings of INTERSPEECH*, Lyon, France, August 2013

Fournier H., Lapointe, J.-F., Kondratova, I, Emond B., **Munteanu C.**, **Crossing the Barrier: A Scalable Simulator for Course of Fire Training.** In *Proceedings of the Interservice/Industry Training, Simulation and Education Conference – IITSEC*, Orlando, USA, December 2012

Fournier H., Lapointe, J.-F., **Munteanu C.**, Emond B., Kondratova, I., **A Multidisciplinary Approach to Enhancing Infantry Training through Immersive Technologies.** In *Proceedings of the Interservice/Industry Training, Simulation and Education Conference – IITSEC*, Orlando, USA, November 2011

Munteanu, C., Molyneaux, H., McDonald, D., Lumsden, J., Leung, R., Fournier, H., Maitland, J., **"Showing off" your Mobile Device: Adult Literacy Learning in the Classroom and Beyond.** In *Proceedings of the 13th International Conference on Human-Computer Interaction with Mobile Devices and Services – MobileHCI*, Stockholm, Sweden, August 2011

Li, H., **Munteanu, C.**, **I-SMOOTH for Improved Minimum Classification Error Training.** In *Proceedings of the 35th International Conference on Acoustics, Speech, and Signal Processing – ICASSP*, Dallas, USA, March 2010

Kazemian, S., Rudzicz, F., Penn, G., and **Munteanu, C.**, **A Critical Assessment of Spoken Utterance Retrieval through Approximate Lattice Representations.** In *Proceedings of the First ACM International Conference on Multimedia Information Retrieval – MIR*, Vancouver, Canada, October 2008

Zhu, X., He, X., **Munteanu, C.**, Penn, G., **Using Latent Dirichlet Allocation to Incorporate Domain Knowledge For Topic Transition Detection.** In *Proceedings of the Tenth International Conference on Spoken Language Processing - ICSLP / Ninth INTERSPEECH*, Brisbane, Australia, September 2008

Munteanu, C., Penn, G., Baecker, R., **Web-Based Language Modelling for Automatic Lecture Transcription**, in *Proceedings of the Tenth ISCA European Conference on Speech Communication and Technology – EuroSpeech / Eighth International INTERSPEECH Conference*, Antwerp, Belgium, August 2007

Munteanu, C., Penn, G., Baecker, R., Zhang, Y., **Automatic Speech Recognition for Webcasts: How Good is Good Enough and What to Do When it Isn't**, in *Proceedings of the Eight International Conference on Multimodal Interfaces - ICMI*, Banff, Canada, November 2006

Munteanu, C., Baecker, R., Penn, G., Toms, E., and James, D., **Measuring the Acceptable Word Error Rate of Machine-Generated Webcast Transcripts**, in *Proceedings of the Ninth ISCA International Conference on Spoken Language Processing*



Munteanu, C., Indexing Methods for Efficient Parsing with Typed Feature Structures, in *Proceedings of the 6th Pacific Association for Computational Linguistics Conference - PACLING*, Halifax, Canada, August 2003 (**Best Paper Award**)

Refereed Short Conference Papers, Refereed Symposia papers, Peer-reviewed Magazine Articles, and Refereed or Juried Workshop and Demo Papers



Gendi M, **Munteanu C. Towards a Chatbot for Evidence Gathering on the Dark Web**. In: *Proceedings of the 3rd International Conference on Conversational User Interfaces 2020*. p. 1–3.



Sin J, **Munteanu C. Let's Go There: Combining Voice and Pointing in VR**. In: *Proceedings of the 2nd International Conference on Conversational User Interfaces 2020*. p. 1–3.



Sin J, **Munteanu C. Whoever Controls the Media, Controls the VUI**. In: *Proceedings of the 2nd International Conference on Conversational User Interfaces 2020*. p. 1–3.



Murad C, **Munteanu C. Alexa, How Do I Build a VUI Curriculum?**. In: *Proceedings of the 2nd International Conference on Conversational User Interfaces 2020*. p. 1–3.



Sin J, **Munteanu C. An Information Behaviour-Based Approach to Virtual Doctor Design**. In: *Proceedings of the 21st International Conference on Human-Computer Interaction with Mobile Devices and Services - MobileHCI*. 2019. p. 1–6. (**Best Paper Award**)



Murad C, **Munteanu C, Stuerzlinger W. Effects of WER on ASR Correction Interfaces for Mobile Text Entry**. In: *Proceedings of the 21st International Conference on Human-Computer Interaction with Mobile Devices and Services - MobileHCI*. 2019. p. 1–6.



Dang Y, **Munteanu C, Epp CD. Engaging Seniors through Automatically-Generated Photo Digests from their Families' Social Media**. In: *Proceedings of the 21st International Conference on Human-Computer Interaction with Mobile Devices and Services - MobileHCI*. 2019. p. 1–6.



Liaqat A, **Munteanu C. Social Learning Frameworks for Analyzing Collaboration with Marginalized Learners**. In: *Conference Companion Publication of the 2019 on Computer Supported Cooperative Work and Social Computing - CSCW*. 2019. p. 288–92.



Murad, C., **Munteanu, C. Teaching for Voice: The State of VUI Design in HCI Education**. In *Proceedings of EduCHI – the CHI Symposium on Curriculum Development in HCI*, 2019.



Murad C, **Munteanu C. 'I don't know what you're talking about, HALexa' the case for voice user interface guidelines**. In: *Proceedings of the 1st International Conference on Conversational User Interfaces - CUI*. 2019. p. 1–3.



Sin, J., Munteanu, C. **A Preliminary Investigation of the Role of Anthropomorphism in Designing Telehealth Bots for Older Adults.** In *Companion Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems – CHI (Extended Abstracts)*, Glasgow, UK, May 2019



Axtell, B., Munteanu, C. **PhotoFlow in Action: Picture- Mediated Reminiscence Supporting Family Socio-Connectivity.** In *Companion Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems – CHI (Extended Abstracts)*, Glasgow, UK, May 2019



Liaquat, A., Munteanu, C. **Hidden Margins: Developing New Ways of Designing for, and with, Older Adult Immigrants.** To appear in *Proceedings of the CHI Symposium on HCI Across the Borders*, 2019.



Murad, C., Munteanu, C. **Designing Accessible Conversational Interfaces for Older Adults: The Case for New Usability Guidelines.** In *Proceedings of the CSCW 2018 Workshop on Accessible Voice Interfaces*. Jersey City, USA, November 2018



Murad, C., Munteanu, C., Clark, L., & Cowan, B. **Design guidelines for hands-free speech interaction.** In *Proceedings of MobileHCI – the 20th International Conference on Human-Computer Interaction with Mobile Devices and Services Adjunct*. ACM. Barcelona, Spain, September 2018. **Best MobileHCI Poster – Honourable Mention.**



Munteanu, C. **HCI Curriculum Across Disciplinary Borders: a Case Study of Teaching UX outside the Computing Sciences.** In *Proceedings of the CHI Workshop on Developing a Community of Practice to Support Global HCI Education*, Montreal, Canada, April 2018.



Conte, S., Munteanu, C. **An Interactive Tactile Aid for Older Adults Learning to Use Tablet Devices.** In *Companion Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems – CHI (Extended Abstracts)*, Montreal, Canada, April 2018



Maqbool, S., Munteanu, C. **Understanding Older Adults' Long-term Financial Practices: Challenges and Opportunities for Design.** In *Companion Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems – CHI (Extended Abstracts)*, Montreal, Canada, April 2018



Axtell, B., Murad, C., Cowan, B., Munteanu, C., Clark, L., Doyle, P. **Hey Computer, Can We Hit the Reset Button on Speech?** In *Proceedings of the CHI Workshop on Conversational Voice User Interfaces*, Montreal, Canada, April 2018.



Cook, S., Munteanu, C. **Phenomenology, Cognitive Science, and Interaction Design for Older Adults.** In *Proceedings of the CHI Workshop on Designing Interactions for the Ageing Populations*, Montreal, Canada, April 2018.



Axtell, B., Munteanu, C. **Frame of Mind: Using Storytelling for Speech-Based Clustering of Family Pictures.** In *Proceedings of the ACM Conference on Intelligent User Interfaces – IUI (Extended Abstracts)*, Tokyo, Japan, March 2018.



Liaqat, A., Axtell, B., **Munteanu, C.**, Demmans Epp, C. **Contextual Inquiry, Participatory Design, and Learning Analytics: An Example.** In *Companion Proceedings of the International Conference on Learning Analytics & Knowledge (LAK18)*. Sydney, Australia, March 2018.



Axtell, B., **Munteanu, C.** **Frame of Mind: Documenting Older Adults' Reminiscence Through Unstructured Digital Picture Interactions.** In *Proceedings of the ACM International Conference on Human-Computer Interaction with Mobile Devices and Services – MobileHCI (Extended Abstracts)*, Vienna, Austria, September, 2017.



Sabie, S., Easterbrook, S., **Munteanu, C.**, Singh, K., **Participatory Shelter Design for Displaced Populace: Reflections from a User Study.** In *Proceedings of the CHI Workshop on Refugees and HCI, held at the ACM SIGCHI Conference on Human Factors in Computing Systems*. Denver, USA, May 2017



Aly, Y., **Munteanu, C.**, Raimondo, S., Wu, A.Y., Wei, M. **Spin-lock Gesture Authentication for Mobile Devices.** In *Proceedings of the International Conference on Human-Computer Interaction with Mobile Devices and Services – MobileHCI (Extended Abstracts)*, Florence, Italy, September 2016



Axtell, B., **Munteanu, C.** **Speech-Enabled Intelligent Mobile Interfaces to Support Older Adults' Storytelling Around Digital Family Pictures.** In *Proceedings of the HCI International Conference (HCII – Extended Abstracts)*, Toronto, Canada, July 2016



Aly, Y., **Munteanu, C.** **An Information-Centric Framework for Mobile Collaboration Between Seniors and Caregivers that Balances Independence, Privacy, and Social Connectedness.** In *Proceedings of the HCI International Conference (HCII – Extended Abstracts)*, Toronto, Canada, July 2016



Robertson, S., **Munteanu, C.** Penn, G. Dialogue Systems for Language Learning and their Complications. In *Proceedings of the Second CHI Workshop on Designing Speech and Language Interactions (DSLII), held at the ACM SIGCHI Conference on Human Factors in Computing Systems*. San Jose, USA, May 2016.



Kazemian, S., **Munteanu, C.** Penn, G. **Challenges in Ethical Design of User Studies with Negotiation Scenarios.** In *Proceedings of the CHI Workshop on Ethical Encounters in HCI, held at the ACM SIGCHI Conference on Human Factors in Computing Systems*. San Jose, USA, May 2016.



Franz, R., **Munteanu, C.**, Barbosa-Neves, B., Baecker, R. **Time to Retire Old Methodologies? Reflecting on Conducting Usability Evaluations with Older Adults.** In *Proceedings of the 2nd Annual Workshop on Designing with Older Adults: Towards a New Methodology, held at the International Conference on Human-Computer Interaction with Mobile Devices and Services – MobileHCI*. Copenhagen, Denmark, August 2015.



Munteanu, C., Tennakoon, C., Garner, J., Goel, A., Ho, M., Shen, C., Windeyer, R. **Improving Older Adults' Online Security: An Exercise in Participatory Design.** In *Proceedings of the ACM Symposium on Usable Privacy and Security (SOUPS)*, Ottawa,

Canada, June 2015.

Munteanu C., Molyneaux, H., O'Donnell, S., Fieldwork with Vulnerable Populations: Ethical Implications for Human-Computer Interaction Research. In *ACM interactions Magazine*, 2014

Munteanu, C., Pardy, T. Look at Me, Coach: A Trainer's Critique of Mobile Apps for Weight Training. In *Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems - CHI Workshop on HCI and Sports*, Toronto, Canada, April 2014

Attarwala, A., **Munteanu, C., Baecker, R., An Accessible, Large Print, Listening and Talking E-book to Support Families Reading Together.** In *Proceedings of the International Conference on Human-Computer Interaction with Mobile Devices and Services – MobileHCI (Extended Abstracts)*, Munich, Germany, August 2013.

Munteanu C., Fournier H., Lapointe, J.-F., Kondratova, I, Emond B., We'll Take it from Here: Letting the Users Take Charge of the Evaluation and Why that Turned Out Well. In *Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems – CHI (Case Studies track)*, Paris, France, April-May 2013

Munteanu C., Molyneaux, H., O'Donnell, S., Balancing Formal Ethics Requirements and the Practicalities of a Field Study with Vulnerable Populations. In *Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems - CHI Workshop on Designing for- and with- Vulnerable People*, Paris, France, April-May 2013

Attarwala, A., Baecker, R., **Munteanu, C., Accessible, Large-Print, Listening & Talking E-book (ALLT).** In *Proceedings of the ACM Conference on Information and Knowledge Management – Workshop on Online Books, Complementary Social Media (BooksOnline)*, Maui, USA, October-November, 2012

McCallum, A., **Munteanu, C., Penn, G., and Zhu, X., Ecological Validity and the Evaluation of Speech Summarization Quality.** In *Proceedings of the 2012 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies NAACL-HLT – Workshop on Evaluation Metrics and System Comparison for Automatic Summarization*, Montreal, Canada, June 2012

Munteanu, C., Transcending the display size: the case for speech interaction in educational applications. In *Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems - CHI – 3rd Workshop on Educational Interfaces, Software, and Technology*, Austin, USA, May 2012

McCallum, A., **Munteanu, C., Penn, G., and Zhu, X., An Ecologically Valid Evaluation of Speech Summarization.** In *Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems - CHI – Work-In-Progress Track*, Austin, USA, May 2012

Munteanu, C., Lumsden, J., Fournier, H., Leung, R., D'Amours, D., McDonald, D., and Maitland, J., ALEX: Mobile Language Assistant for Low-Literacy Adults. In *Proceedings of the 12th International Conference on Human-Computer Interaction with*

Mobile Devices and Services – MobileHCI (Lisboa, Portugal) - September 2010.

Munteanu, C., Lumsden, J., Fournier, H., Leung, R., D'Amours, D., McDonald, D., and Maitland, J., ALEX – Supporting Low-Literacy Adults through Mobile Computing. In *Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems - CHI – Workshop on Design to Read*, Atlanta, USA, April 2010.

Fenwick, K., Massimi, M., Baecker, R., Black, S., Tonon, K., **Munteanu, C.,** Rochon, E., and Ryan, D., **Cell Phone Software Aiding Name Recall.** In *Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems - CHI – Work-In-Progress Track*, Boston, USA, April 2009.

Munteanu, C., Baecker, R., and Penn, G., **Usable Speech Recognition: Toward Improved Access to Webcast Lectures,** in *Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems - CHI – Workshop on Usable Artificial Intelligence*, Florence, Italy, April 2008

Munteanu, C., Zhang, Y., Baecker, R., and Penn, G., **Wiki-like Editing of Imperfect Computer-Generated Webcast Transcripts,** in the *Demo track of the 20th ACM Conference on Computer Supported Cooperative Work - CSCW*, Banff, Canada, November 2006.

Munteanu, C., **Indexing Methods for Efficient Parsing,** in *Proceedings of the Joint Third International Conference on Human Language Technology / Third Meeting of the North American Chapter of the Association for Computational Linguistics - HLT/NAACL - Student Research Workshop*, Edmonton, Canada, 2003

Munteanu, C. and Boldea, M., **A Description Language for Dialog Modeling and Management,** in *Proceedings of the 4th International Conference on Technical Informatics - CONTI*, Timișoara, Romania, October 2000

Munteanu, C. and Boldea, M., **MDWOZ: A Wizard of Oz Environment for Dialog Systems Development,** in *Proceedings of the 2nd International Conference on Language Resources and Evaluation - LREC*, Athens, Greece, May 2000

Boldea, M., **Munteanu, C.,** and Doroga, A., **Design, Collection and Annotation of a Romanian Speech Database,** in *Proceedings of the First International Conference on Language Resources and Evaluation - LREC - Workshop on Speech Database Development for Central and Eastern European Languages*, Granada, Spain, May 1998

Boldea, M. and **Munteanu, C.,** **Labeling a Romanian Speech Database,** in *Proceedings of the Second International Workshop "Speech and Computer" - SPECOM*, Cluj-Napoca, Romania, October 1997

Refereed Abstracts of Workshops, Panels, and Tutorials (as author, moderator, or principal organizer)

2016 – present “Ethics Town Hall”, moderator and panellist for panel help at several ACM SIGCHI conferences (CHI 2016, 2017, 2018, 2019; CSCW 2017, 2018, MobileHCI 2018 and

- 2019, ICMI 2017). Co-author of the initial submission, and panellist (and moderator in rotating years). Short paper describing the most recent panel (several versions of this paper have been published):
Munteanu C, Bruckman A, Muller M, Frauenberger C, Fiesler C, Kraut RE, et al. **SIGCHI Research Ethics Town Hall**. In: *Extended Abstracts of the 2019 CHI Conference on Human Factors in Computing Systems*. 2019. p. 1–6.
- 2018 – present
 “Conversational User Interfaces”, workshops held in conjunction with several ACM SIGCHI conferences (CHI 2018, 2019, MobileHCI 2020, IUI 2020). Co-author (rotating principal author) of the initial submission, and co-organizer of the workshop. Short paper describing the workshop (several versions of this paper have been published):
Munteanu C, Clark L, Cowan B, Candello, H, Schlögl S, Torres MI, Edwards J, et al. **CUI: Conversational User Interfaces: A Workshop on New Theoretical and Methodological Perspectives for Researching Speech-based Conversational Interactions**. In: *Proceedings of the 25th International Conference on Intelligent User Interfaces Companion*. 2020.
- 2018 – present
 “Rethinking Mobile Interfaces for Older Adults”, workshops held in conjunction with the ACM CHI Conferences (2017, 2018, 2019, 2020). Co-author of the initial submission and main organizer of the workshop. Short paper describing the workshop (several versions of this paper have been published):
 Sarcar S, **Munteanu C**, Jokinen J, Charness N, Dunlop M, Ren X, et al. **Designing Interactions for the Ageing Populations-Addressing Global Challenges**. In: *Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems*. 2020. p. 1–5.
- 2018
 “Accessible Voice Interfaces”, workshops held in conjunction with the ACM CSCW Conference (2018). Co-author of the initial submission and main organizer of the workshop. Short paper describing the workshop:
 Brewer RN, Findlater L, Kaye J, Lasecki W, **Munteanu C**, Weber A. **Accessible Voice Interfaces**. In *Companion of the 2018 ACM Conference on Computer Supported Cooperative Work and Social Computing* 2018 Oct 30 (pp. 441-446).
- 2014 – present
 “Designing Speech and Language Interactions”, workshops held in conjunction with several ACM SIGCHI conferences (CHI 2014, 2016, 2017, MobileHCI 2018, 2020). Principal author of the initial submission and main organizer of the workshop. Short paper describing the workshop (several versions of this paper have been published):
Munteanu C, Irani P, Oviatt S, Aylett M, Penn G, Pan S, Sharma N, Rudzicz F, Gomez R, Cowan B, Nakamura K. **Designing speech, acoustic and multimodal interactions**. In *Proceedings of the 2017 CHI conference extended abstracts on human factors in computing systems* 2017 May 6 (pp. 601-608).
- 2016 – present
 “Ethical Challenges During Field Studies of Interactive Technologies”. Peer-reviewed course, presented at several ACM SIGCHI conferences (CHI 2016, MobileHCI 2016, CHI 2017, CHI 2019, CHI 2020). Short paper describing the course (several versions of this paper have been published):
Munteanu C, Waycott J, McNaney R. **Dealing with Ethical Challenges in HCI**

- Fieldwork.** In: *Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems*. 2020. p. 1–4.
- 2010-present “Speech-based Interaction: The Myths, Challenges, and Opportunities of Speech-based Interaction”. Peer-reviewed course presented at:
- ACM CHI Conference (2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018)
 - ACM MobileHCI Conference (2010, 2011, 2012, 2013, 2014, 2017, 2018)
 - HCI International Conference (2016, 2017, 2018, 2019, 2020)
 - ACM IUI Conference (2015)
- Short paper describing the course (several versions of this paper have been published):
Munteanu C, Penn G. Speech and Hands-free interaction: myths, challenges, and opportunities. In *Extended Abstracts of the 2018 CHI Conference on Human Factors in Computing Systems* 2018 Apr 20 (pp. 1-4).
- 2015-16 “Ethical Encounters in HCI”, workshop held in conjunction with the ACM CHI 2015, 2016, and 2017 Conference (co-author of the initial submission and organizer of the workshop). Short paper describing the workshop (several versions of this paper have been published):
Waycott J, **Munteanu C**, Davis H, Thieme A, Branham S, Moncur W, McNaney R, Vines J. **Ethical encounters in HCI: implications for research in sensitive settings.** In *Proceedings of the 2017 CHI Conference Extended Abstracts on Human Factors in Computing Systems* (pp. 518-525).
- 2010-present “Speech-based Interaction for Serious Games and Simulator Training”. Peer-reviewed course presented at the Interservice/Industry Training, Simulation and Education Conference – I/ITSEC, Orlando, USA (2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018)
- 2017-18 “Workshop on Renewing the HCI Curriculum: Bridging the Gap between Research, Industry Trends, and Curriculum Renewal within Human-Computer Interaction”. Held in conjunction with the 2017 and 2018 Graphic Interfaces Conferences – GI. Co-organized with Olivier St-Cyr – these workshops formed the basis for the launch of the EduCHI Symposium series.
- 2013 “We Need to Talk: HCI and the Delicate Topic of Spoken Language Interaction”, panel at the ACM CHI 2013 Conference (principal author of the initial submission). Short paper describing the panel:
Munteanu C, Jones M, Oviatt S, Brewster S, Penn G, Whittaker S, Rajput N, Nanavati A. **We need to talk: HCI and the delicate topic of spoken language interaction.** In *CHI 2013 Extended Abstracts on Human Factors in Computing Systems*, pp. 2459-2464.
- 2012 “Complementary Evaluation Measures for Speech Transcription”, a six-week grand-challenge workshop in conjunction with the John Hopkins University Summer School on Human Language Technology (co-author of the initial proposal)
- 2012 SiMPE: The 7th Workshop on Speech and Sound in Mobile and Pervasive Environments, in conjunction with the ACM Mobile HCI 2012 Conference (co-author of the the initial proposal)

Theses

Useful Transcriptions of Webcast Lectures, PhD Thesis, University of Toronto, 2009

Indexing Methods for Efficient Parsing with Typed Feature Structures, Master of Science Thesis, University of Toronto, 2004

Human-Computer Dialog Modeling and Control, Master of Applied Science in Engineering Thesis, "Politehnica" University of Timisoara, 2000

A Development Environment for Dialog Systems Using the Wizard of Oz Technique, Engineering Diploma Thesis, "Politehnica" University of Timisoara, 1999

Technical Reports

Munteanu, C., Sadownik, S., Xu, Z. Ethical dilemmas during field studies of emerging and disruptive technologies – is our current state of knowledge adequate? Social Sciences and Humanities Research Council of Canada (SSHRC), November 2016

Munteanu, C., Audio Setup and Control for ePresence Webcasts, ePresence/KMDI Technical Manual, <http://ePresence.tv>, Knowledge Media Design Institute, University of Toronto, May 2005

Munteanu, C. and Chou, W., A Study of Robust Parsing Methods for Spoken Language Processing, Technical Report, Avaya Labs Research, Basking Ridge, NJ, USA, September 2004

Media Appearances

CBC The National. Jan 2020. Invited interview on Older Adults and Online Safety.

Blake E. Connecting with Tech: Research explores how devices can help bring us together. Featured Interview, UTM News. March 2020.

Toronto Star interview (May 2018). “There’s technology to fix the Alert Ready system”

Ledger, B. Seniors want to know whom they can trust online. Featured Interview, University of Toronto Magazine. Jan 2018.

CBC Radio The Current. Featured interview on Older Adults and Virtual Doctors. Jan 2018.

Zoomer TV Live Panel. Older Adults and Online Safety. July 2017.

Caton, H. **What digital divide? Seniors, youth embrace technology**. InsideToronto Magazine, January 2017

Cheung, M. **Holidays can be lonely for seniors, but new app can help**. CBC News (online, TV, and radio), December 2016

Blake, E. **Rated G for Grandparents: UTM research to help families connect through videogames.** University of Toronto Magazine, September 2016

Gaming with Grandma? Intergenerational gaming helps families connect. University of Toronto online front news, September 2016

Walker, A., **Munteanu, C. While one generation's out hunting Pokemon, another is forgotten at home.** The Globe and Mail, August 2016.

Rezende, A. **How to revive table conversations in the age of social media.** CBC News (online), May 2016.

Blake E. **Helping seniors feel safer online: new research from University of Toronto.** In U of T Magazine, March 2016.

Textbooks

Ilin, A. and *Munteanu, C.*, **Computer Programming - the C Language**, "Orizonturi Universitare" Publishing House, Timișoara, Romania, 2000

Research Experience

- 2011-present Faculty supervisor for University of Toronto graduate and undergraduate students, conducting multidisciplinary research on:
- Virtual technologies to improve Quality of Life at the End of Life (CIHR AAL Grant)
 - Mobile and multimodal technologies to support critical information access and social connectedness for older adults (AGE-WELL NCE Grant)
 - Multimodal and intelligent assistive interfaces to support reading, writing, and knowledge acquisition by marginalized users (NSERC DG Grant)
 - Online safety for older adults (UTM RSAF Grant)
 - Ethical challenges of conducting field studies of emerging technologies in sensitive settings (SSHRC KS Grant)
 - Mobile and multimodal technologies to support ageing (SSHRC Grant)
 - User-motivated measures of quality for natural language processing systems such as automatic summarization or pronunciation assessment (Private industry grants from Avaya Labs and Speax Inc.)
 - Interaction with natural language systems such as named entity recognition (US Army Research Labs Grant)
- 2012-2014 Principal investigator and team lead for three new long-term research programs at the National Research Council, in collaboration with several industrial partners:
- Mobile and multimodal interaction for safety-critical and context-aware systems – research under the “Working and Travelling on Aircraft” program
 - Mobile and multimodal personal assistive technologies for learning – research under the “Learning and Performance Support Systems” program
 - Visual analytics on hybrid unstructured information – research under the “Asset

Management using Prescriptive Analytics” program

Co-investigator for several multidisciplinary programs and activities at the National Research Council:

- Study of ethical challenges in conducting fieldwork in Human-Computer Interaction (internal project)
- Study to identify emerging technologies that will have an impact on the daily lives of Canadians in the next decade (Commissioned by the Social Sciences and Humanities Research Council of Canada – SSHRC)
- Persuasive and behavioural modification technologies – research under the “High-Performance Buildings” program
- Interfaces for remote operation of unmanned aerial vehicles (UAV), and development of technologies to facilitate social acceptance of such vehicles – research under the “Civilian UAV” program

- 2009-2012 Principal investigator and team lead for two research projects at the National Research Council, Institute for Information Technology
- ALEX: Mobile Adult Literacy Support Application for EXperiential Learning (collaboration with the Department of Post-secondary Education, Training, and Labour, Province of NB – Community Adult Learning Branch)
 - IRET-MINT: Immersive Reflexive Engagement Trainer (IRET) – Multimodal Interaction (collaboration with Department of National Defence – CFB Gagetown - Combat Training Center Tactical School and with the Fredericton Police Department)
- 2004-2009 Investigator for Improving the Usefulness and Usability of Webcast Lectures and Presentations through Automatic Speech Recognition. Department of Computer Science, University of Toronto, Canada. Principal investigators: Prof. Ronald Baecker and Prof. Gerald Penn. (Project 3.3 of the NSERC-funded NECTAR Strategic Research Network)
- 2002-2003 Investigator for Indexing Methods for Parsing with Typed Feature Structure Grammars. Department of Computer Science, University of Toronto, Canada. Principal investigator: Prof. Gerald Penn. (NSERC Discovery Grant)
- 1998-2001 Investigator for Spoken Dialog Systems / Automatic Processing and Recognition of Continuous Speech. Department of Computer and Software Engineering, Politehnica University of Timișoara, Romania. Principal investigator: Prof. Marian Boldea (Romanian Higher Education Scientific Research Council grant)
- 1997-1998 Research assistant for BABEL: A Multi-language Database, Politehnica University of Timișoara, Romania (European Commission Copernicus Grant)

Invited Talks and Presentations

- Oct 2020 “Challenges and Approaches to the Ethical Design, Development, and Procurement of Age-Tech” – AGE-WELL Policy Forum (online / Canada)

- Jun 2020 “Designing for Older Adults: Overcoming Barriers toward a Safe Retirement”. Invited talk at the International Pension Reform Association Annual Meeting held at the Organization for Economic Co-operation and Development (OECD), Paris, France
- Mar 2020 “Toward a Supportive and Healthy Retirement: Designing Digital Applications”. Invited community outreach presentation. Burlington Chronic Pain Network (McMaster University).
- Jan 2020 “From user-friendly to senior-friendly: leveraging UX practice to develop inclusive services” – Invited presentation at the NRC Aerospace Canada-Japan summit. Ottawa
- Oct 2019 “Designing Natural, Social, and Inclusive Applications for Older Adults” – Invited presentation to the Fredericton City Council, New Brunswick.
- Aug 2019 “My dearest Alexa, would you be so kind as to let me know what the bloody weather may be today?”. Opening plenary keynote. International Conference on Conversational User Interface (ACM In-cooperation). Dublin, Ireland
- June 2019 “Ethical challenges during field studies of emerging technologies in sensitive settings”. Plenary keynote at the Ethics and Personal Data Protection Symposium. Universitat Pompeu Fabra, Barcelona, Spain.
- June 2019 “A policy and practice-based workshop on avoiding and mitigating ethical traps in technocentric fieldwork”. Full-day training workshop for faculty members at the Universitat Pompeu Fabra, Barcelona, Spain.
- Apr 2019 Overcoming Older Adults' Digital Marginalization through Empowering Design Approaches. Invited talk at the Health Innovation Week, University Health Network Toronto, and Invited talk at the Thought and Cognition Symposium, University of Toronto.
- Mar 2019 “Overcoming Older Adults' Digital Marginalization through Empowering Design Approaches”, invited talk at the Thought and Cognition Symposium, Toronto.
- Feb 2019 Seniors' Online Safety: Privacy, Security, & Online Scams. Invited community outreach presentation. Flemingdon Health Centre, North York, ON, Canada
- Oct 2018 Overcoming Digital Marginalization through UX Design Toward a Supportive, Safe, and Healthy Retirement. Plenary talk. AGE-WELL Annual General Meeting, Vancouver.
- Jul 2018 Inclusive Interactive Apps for Older Adults. Invited community outreach presentation. Greater Fredericton Social Innovation foundation, New Brunswick, Canada
- June 2018 From user-friendly to senior-friendly digital technologies: improving the practice of UX design. Design Meets Health. Toronto.
- May 2018 “Designing for Older Adults”. Invited presentation at the Wharton School of the University of Pennsylvania – Symposium on Pension Reform.

- Apr 2018 Creating Digital Picture Reminiscence with Older Adults. Invited talk at the annual NICE-ANKE symposium. Toronto.
- Apr 2018 Research Ethics Town Hall. Invited panel. ACM CHI conference. Montreal.
- Apr 2018 Conversational Voice UI. Invited panel. ACM CHI conference. Montreal.
- Apr 2018 User-Centred Design and Stakeholder Engagement: A Practical Perspective. Invited talk at the NextGenUX Industry-Academia partnership event. Fredericton.
- Apr 2018 Designing Natural, Social, and Safe User Interfaces to Reduce the Digital Marginalization of Older Adults Invited plenary at the NextGenUX Industry-Academia partnership event. Fredericton.
- Feb 2018 Ethical challenges during field studies of emerging technologies in sensitive settings. Invited talk, Carleton University, Ottawa.
- Feb 2018 A policy and practice-based workshop on avoiding and mitigating ethical traps in technocentric fieldwork. Invited graduate training workshop. Carleton University, Ottawa.
- Nov 2017 Research Ethics Town Hall. Invited panel. ACM ICMI conference. Montreal.
- Nov 2017 Bridging Generations and Reducing Marginalization through Interactive Technologies. Invited Talk, Gilbrea Centre for Ageing, McMaster University, Hamilton.
- March 2017 Research Ethics Town Hall: Working Towards Community Norms. Invited panel. ACM CSCW Conference, Portland, USA.
- Apr 2017 Natural Language Processing and Human-Computer Interaction: Opportunities for Fintech. Invited Tech Talk. RBC Bank, Toronto.
- March 2017 Bridging Generations and Reducing Marginalization through Natural and Social User Interfaces. Invited lecture. Simon Fraser University, Vancouver.
- Oct 2016 Ethical challenges during field studies of emerging technologies in sensitive settings. Invited lecture. McGill University, Montreal.
- Aug 2016 “AI, Seniors, and Family Stories”. Invited talk at the launch event for the Digital Humanities Network at the University of Toronto.
- July 2016 User-Centred Design and Stakeholder Engagement: A Practical Perspective. Invited workshop at the AGE-WELL Summer Institute, Mont-Tremblant, Canada
- March 2016 Natural interactions with assistive technologies for under-represented users. Invited presentation at the TUX Speaker Series (Toronto area User Experience professional network), Toronto, Canada.
- March 2016 Challenges in the Ethical Conduct of Research with Human Participants in Sensitive Settings. Cross-Canada AGE-WELL HQP Training Webinar.

- Feb 2016 The rise of the intelligent machines: Bridging or widening the digital divide for underserved users? Invited talk, The Speaker Series of the McLuhan Program in Culture and Technology, Coach House Institute, University of Toronto.
- Jun 2015 “Technologies for Ageing Gracefully”, Invited presentation at the NRC Summit on Ageing (Industry / Academia / Government stakeholder consultation), Ottawa, 2015
- Jun 2015 Invited hands-on design workshop, Markham Library Staff Conference, Markham, Canada.
- May 2015 Instruments of Change: the politics of voice and voice recognition technology. Panellist at the 18th Annual Subtle Technologies Festival on Expanded Notions of Sound in Science and Art. Toronto, Canada.
- May 2015 “Bridging Generations with Interactive Technologies”. Invited talk, Markham Public Library, Markham, Canada.
- April 2015 “Breaking the barriers of conventional interfaces: natural interactions with assistive technologies”. Invited lecture, University of Ontario Institute of Technology, Faculty of Sciences, Oshawa, Canada.
- February 2015 “Technologies for Ageing Gracefully: Bridging Generations”. With Barbara Barbosa-Neves. Invited talk, Conference Board of Canada symposium on Healthy Aging: Bridging Generations through Technology. Toronto, Canada
- December 2014 “Breaking the barriers of conventional interfaces. Multimodal interfaces and new media making interaction with assistive technologies more natural”. Invited talk, University of British Columbia, Department of Computer Science, Vancouver, Canada.
- October 2014 “Frailty Focused Care: Challenges and Technological Opportunities”. With Barbara Barbosa-Neves. Invited talk, Sunnybrook Health Sciences Centre, Toronto, Canada.
- September 2014 “Dude, where's my interface? How natural interactions and new media are helping us forget about the traditional interface”. Invited lecture, Knowledge Media Design Institute, Toronto, Canada.
- October 2013 “Speech and Language-based Literacy Support Technologies”. Invited presentation at the Health Literacy Research Conference, panel on Technology-based Interventions for Low Health Literacy, Washington, DC, October 2013.
- December 2011 “Next-generation mobile learning”. Invited talk at the 2011 GoFredX Inspiring Innovation Conference, Fredericton, Canada.
- May 2011 Invited panellist for the “Research on the Digital Economy” Colloquium, in conjunction with the 2011 Congress of the Humanities and Social Sciences, Fredericton, Canada
- 2010-11 “IRET: Multimodal Interactive Simulator for Public Safety and Defence Training” – panel presentation at the
 - 2011 Heidelberg Innovation Forum, Heidelberg, Germany

- 2010 New Brunswick Innovation Forum, Saint John, NB, Canada
- June 2010 “Supporting Low-Literacy Adults through Mobile Computing”. Department of Computer Science, University of Toronto (invited talk)
- October 2009 “ALEX: Mobile Adult Literacy Support Application for EXperiential Learning”, panel presentation at the 2009 New Brunswick Innovation Forum, Saint John, NB, Canada
- November 2007 “Usable speech recognition: can humans improve ASR?”. Invited talk at the:
- Computer Science and Artificial Intelligence Laboratory, Massachusetts Institute of Technology, Cambridge, USA
 - Computer Science Department / Centre for Management Informatics, Dalhousie University, Halifax, Canada
- August 2006 “Statistical Analysis for Hypothesis Testing: A Case Study,” Statistics Research Group, Department of Computer Science, University of Toronto (invited talk)
- June 2005 "Usable Transcriptions of Webcast Lectures and Presentations," NECTAR Theme 3 Meeting, Toronto (ePresence webcast talk)

Teaching Experience

- 2014-present Instructor for undergraduate courses at the Institute of Communication, Culture, Information, and Technology, University of Toronto at Mississauga:
- User-Integrated Design for Interaction (4th year)
 - User Experience Design (4th year)
 - User Experience Analysis (4th year)
 - Human-Computer Interaction and Communication (3rd year)
 - Special Topics in Communication, Culture, and Information Technologies (3rd year)
 - The Interactive Society (3rd year)
 - Introduction to Immersive Environments (3rd year)
- 2016-present Instructor for graduate courses at the Faculty of Information, University of Toronto:
- User-Centred Information Systems Development (Masters level)
 - Special Topics in Interactive Systems (PhD level)
- 2016-present Tutorial and course on Ethical Challenges in HCI, presented ACM and AGE-WELL conferences, as well as invited lectures at Canadian and International universities
- 2010-present Tutorial and course on Speech-Based Interaction, presented at more than thirty ACM, HCII, and industry conferences
- 2007 Course instructor for Principles of Programming Languages (third year undergraduate), Department of Computer Science, University of Toronto
- 2001-2009 Teaching assistant at University of Toronto, Computer Science (more than 20

appointments, graduate and undergraduate)

- 2001 C Language Instructor for new employees at Siemens Automotive Company, Timișoara, Romania
- 2000 Co-author of the undergraduate textbook Computer Programming - the C Language, "Orizonturi Universitare" Publishing House, Timișoara, Romania
- 1999-2001 Full-time Lecturer and Teaching Assistant for Programming Techniques: Computer Programming using the C Language (second year undergraduate) at the Department of Computer and Software Engineering, Politehnica University of Timișoara, Romania

Awards and patents

- 2020 **CSCW Paper Diversity Award**
- 2019 **Best paper, *IEEE Pervasive Computing***
- 2019 **Best paper** (short papers category). ACM SIGCHI MobileHCI conference.
- 2019 **Best of CHI Honourable Mention, *ACM CHI*.**
- 2018 **Best of MobileHCI Poster Honourable Mention, ACM SIGCHI MobileHCI conference.**
- 2017 **Best paper** (short papers category). LAK conference.
- 2015 **Best of CHI Honourable Mention, *ACM CHI*.**
- 2011 "Explosive door breach training system" (patent pending, US WO/2011/106873, International PCT/CA2011/000214)
- 2008-2009 **Wolfond Scholarship** in Information Technology
- 2007-2008 **Ontario Graduate Scholarship (OGS)**
- 2006 **Best of CHI Nominee, *ACM SIGCHI Conference on Human Factors in Computing Systems - CHI*, Montreal, Canada**
- 2003 **Best Paper Award, *Pacific Association for Computational Linguistics Conference - PACLING*, Halifax, Canada**

Professional and mentoring activities

- 1999 - present Conference organization and committee membership:
- Program subcommittee co-chair for the ACM CHI 2021 conference (committee: Aging and Accessibility)
 - Program committee member for the CUI 2020 Conference (Posters and Demo chair)

- Program committee member for the ACM CHI 2019 conference (Career Development Chair)
- Member of the organizing committee for the ACM MobileHCI 2019 conference (Industry Perspectives chair)
- Program committee member for the 2018 and 2019 EduCHI Symposiums co-located with the ACM CHI Conference
- Program committee member for the ACM CHI 2018 conference (Posters Chair)
- Member of the organizing committee for the ACM ICMI 2018 conference (Late Breaking Work / Posters Chair)
- Member of the organizing committee for the ACM ICMI 2017 conference (Demos Chair)
- Member of the organizing committee for the ACM MobileHCI 2017 conference (Demos Chair)
- Program committee member for the ACM CHI 2017, 2019, 2020 conference (Associate Chair)
- Program committee member for the Canadian GI 2017 conference (Associate Chair)
- Program chair for the 2016 IxAP Symposium (Interactive Technologies and Ageing Populations)
- Program committee member for the ACM MUM 2016 conference (Associate Chair)
- Program committee member for the Canadian GI 2016 conference (Associate Chair)
- Main organizer for the ACM CHI 2014 and 2016 Workshop on Designing Speech and Language Interactions
- Co-organizer for the ACM CHI 2015 and 2016 Workshop on Ethical Encounters in HCI
- Co-organizer of the GI 2017 and 2018 Workshops on Renewing the HCI Curriculum
- Member of the steering committee for the Older Adults Workshop series (since 2016)
- Member of the organizing committee for the ACM MobileHCI 2016 conference (Publicity Chair)
- Member of the organizing committee for the ACM ICMI 2015 conference (Grand Challenges Chair)
- Member of the organizing committee and panellist for the ACM CHI 2016 Special Interest Group (SIG) on Rethinking Mobile Interfaces for Older Adults
- Program committee member for the ACM CHI 2016 conference (Associate Chair)
- Program committee member for the ACM MobileHCI 2016 conference (Associate Chair)
- Program committee member for the Canadian GI 2016 conference (Associate Chair)
- Program committee member for the ACM MUM 2015 conference (Associate Chair)
- “We Need to Talk: HCI and the Delicate Topic of Spoken Language Interaction”, Panel at the ACM CHI 2013 Conference (role: moderator)
- SIMPE: the 7th Workshop on Speech and Sound in Mobile and Pervasive Environments, in conjunction with the ACM MobileHCI 2012 Conference
- “Complementary Evaluation Measures for Speech Transcription”, workshop at the John Hopkins University Summer School on Human Language Technology
- Member of the Program Committee for the Student Scientific Symposium, SCSS 2000, "Politehnica" University of Timișoara, Romania

2015

Panelist for the Doctoral Consortium at the ACM MobileHCI 2015 Conference

- ongoing Primary supervision of graduate and undergraduate students and research associates; thesis examinations:
- Six PhD students at University of Toronto (since 2015)
 - Fifteen MSc and MI students at University of Toronto (since 2015 – twelve of which have graduated)
- Non-thesis supervision of undergraduate students:
- More than thirty undergraduate research students at University of Toronto Mississauga (since 2014) and University of Toronto (since 2009)
 - Supervised reading courses for undergraduate students at University of Toronto Mississauga (ICCIT) and graduate students at University of Toronto (Faculty of Information) (since 2014)
 - Two NSERC USRA students at University of Toronto (2014)
 - One graduating thesis project at University of New Brunswick (2011)
 - Three graduating thesis projects at Politechnica University Timisoara (2000-2001)
- Thesis committee member for PhD students:
- Two PhD students at University of Toronto, Faculty of Information (since 2014)
 - One PhD student at University of Toronto, Dept. of Computer Science (since 2015)
 - One PhD student at University of Toronto, Department of Psychology (since 2017)
- Thesis examination member for masters students:
- Two MSc students at University of Toronto, Dept. of Computer Science (since 2014)
 - One MI student at the University of Toronto, Faculty of Information (since 2014)
- External examinations:
- One PhD final examination at McGill University (external)
 - One PhD final examination at University of Toronto (internal-external)
- Supervision of research staff (graduate and post-graduate):
- Five research associates at University of Toronto (since 2015)
- Co-supervision of graduate students:
- Two MSc students at University of Toronto (since 2016)
 - MSc student at University of Toronto (graduated 2012)
 - PhD student at University of Toronto (since 2011, graduated 2015)
 - MEd student at University of New Brunswick (2009-2010)
- 2009 – 2014 Supervision of researchers and developers as team lead for research projects at the National Research Council
- 2011-2012 Member of the Platform Committee of the Atlantic Human Rights Centre, Saint Thomas University, Fredericton, NB
- 2011 Mentor for the high-school team that won the 1st prize in the Conrad Foundation's NASA Spirit of Innovation Awards Competition
- 2006-present Reviewer for:
- International Journal of Human-Computer Interaction
 - ACM Transactions on Human-Computer Interaction (ToCHI)
 - ACM Transactions on Accessible Computing (T-Access)
 - International Journal of Rehabilitation and Assistive Technology Engineering (RATE)
 - The ACM SIGCHI Conference on Human Factors in Computing Systems (both main

conference and workshop papers)

- The ACM SIGCHI Conference on Accessible Computing (ASSETS)
- The ACM SIGCHI Conference on Mobile Human Computer Interaction (MobileHCI)
- The ACM SIGCHI Conference on Intelligent User Interfaces (IUI)
- The ACM SIGCHI Symposium on Engineering Interactive Computing Systems
- The ACM Conference on Computer Supported Cooperative Work (CSCW)
- The ACM-IEEE International Conference on Multimodal Interaction
- The ACM Symposium on User Interface Software and Technology (UIST)
- The NAACL Conference on Human Language Technologies (part of the Conference Program Committee for workshop papers)

2009	Judge for the showCaSe Competition (Department of Computer Science, University of Toronto)
November 2006	Volunteer for the 20th ACM Conference on Computer Supported Cooperative Work - CSCW, Banff, Canada
2004-2007	Consultant, ePresence webcast production and development team (webcast interface development, audio and video engineering, production of live webcasts)
Summer 2004	Summer intern at Avaya Research, Basking Ridge, NJ, USA (Topic: Robust Parsing for Spoken Language Understanding)
October 1997	Research stay at the Institute of Computational Linguistics, Saarbruecken University, Germany (Topic: Labeling of Speech Signals)

Languages

English (bilingual proficiency), Romanian (native), Italian (conversational), French (professional reading/writing/understanding proficiency)