

CRISTINA GETSON

PhD Candidate
Mechanical and Industrial Engineering
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I explore how people interact with social robots. I hold a Bachelor of Applied Science in Engineering Science from the University of Toronto, and collaborative specializations in Psychology and Robotics. I have extensive product and project management experience in the telecommunication and educational technology sectors. Currently researching human-robot interaction, ethics, and AI in healthcare, with a focus on the design of social robots to assist vulnerable populations.

EDUCATION

- 2020 – 2025 Doctor of Philosophy (Ph.D.), University of Toronto
Mechanical and Industrial Engineering, Robotics
Advisor: Dr. Goldie Nejat
Thesis: Development of a Framework for Social Robot Behaviours and Strategies in Human-Robot Interaction with Vulnerable Populations
- 1994 – 1998 Bachelor of Applied Science (B.A.Sc.), University of Toronto
Division of Engineering Science, Biomedical option
- 1996 – 1997 Institut National Polytechnique de Grenoble, France
Rhône-Alpes international student exchange program

ACADEMIC EXPERIENCE

- 2024 – 2025 **Graduate Fellow**, Schwartz Reisman Institute for Technology and Society
- 2020 – 2025 **Research Assistant**, Autonomous Systems and Biomechatronics Lab
Mechanical and Industrial Engineering, University of Toronto
- 2021 – 2024 **Teaching Assistant**, MIE443: Mechatronics Systems, Design & Integration,
University of Toronto

PROFESSIONAL EXPERIENCE

- 2015 – 2020 **Director/Owner**, Cristina Getson Learning Solutions
Managed the redevelopment of clients' online professional learning platforms
Provided educational technology consulting services
Created and tested bilingual digital tools for online learning (K – 12)
- 2014 – 2015 **Founder**, Like2Minds
Built a learning recommendation service that curates educational content based on an individual's learning preferences
Researched product-market fit; explored corporate education solutions
Used agile methodology to build a Minimum Viable Product
- 2010 – 2014 **Digital Product Manager**, Pearson Education Canada
Led the delivery of a web application tool to help teachers capture learning in the classroom; managed the design and development of a mobile version of the tool; used agile development to scale the product across multiple grades
Managed the development and customization of a digital content management system for the K – 12 market; conducted usability testing; oversaw content management, metadata creation to place legacy print product onto a digital platform
Led, coordinated, and conducted pilot project research based on new digital product prototypes; consulted on mobile strategy across disciplines for K – 12
Researched, planned, created, and developed the School Division's first educational mobile apps on the iOS platform (in mathematics and early language learning)
Commissioned and managed freelance staff
- 2004 – 2010 **Project Manager**, School Math, Pearson Education Canada
Managed the development and creation of new digital content for K – 12 math
Substantively edited manuscripts by working with authors, reviewers, senior editors
Collaborated with the Publisher, and teams in New Media, Design, and Production to take a project through from inception to completion
- 2001 – 2003 **Business Analyst & Project Manager**, ember ec3 inc.
Consulted with leading financial services companies, assisted with business planning, implementation, and maintenance of ember's web-based software
Worked with Sales/Marketing, Engineering, and Design teams on project proposals
Oversaw QA testing; acted as liaison between client and Engineering team
Performed competitive analyses of competitors' products
- 1999 – 2001 **Systems Engineer**, Optical Networks, Nortel Networks
Developed customized presentation material and delivered client learning sessions on Nortel's portfolio of high-capacity optical networking projects
Created and managed project plans to support the introduction, planning, and deployment of new Optical Networks portfolio into customers' or affiliated/subsidiaries' networks

- 1998 – 1999 **International Project Manager**, IBM Canada
Managed and coordinated multiple international data network installations, from planning to installation

GRANTS & AWARDS

- 2024 Schwartz Reisman Institute for Technology and Society Graduate Fellowship (\$7,500)
2024 Queen Elizabeth II Graduate Scholarship in Science and Technology (\$15,000)
2023 Queen Elizabeth II Graduate Scholarship in Science and Technology (\$15,000)
2022 Department of Mechanical and Industrial Engineering Endowed Fellowship: Applied Science Graduate Student Endowment Fund (APSC GSEF) Award (\$6,500)
2022 University of Toronto Mechanical & Industrial Engineering Conference Grant (\$750)
2022 University of Toronto School of Graduate Studies Travel Grant (\$1,250)

PUBLICATIONS

Peer-Reviewed Journal Articles

- 2024 **C. Getson** and G. Nejat, "Care Providers' Perspectives on the Design of Assistive Persuasive Behaviors for Socially Assistive Robots," *Journal of the American Medical Directors' Association*, special issue on Technology in PA-LTC: Innovations and Applications, 2024.
- 2023 **C. Getson** and G. Nejat, "Human-Robot Interactions with an Autonomous Health-Screening Robot in Long-Term Care Settings," *Advanced Robotics*, 37:24, 1576 – 1590, 2023.
- 2022 **C. Getson** and G. Nejat, "The Adoption of Socially Assistive Robots for Long-Term Care: During the Pandemic and in a Post-COVID-19 Society," *Healthcare Management Forum Special Edition on Aging, Technology and Health in a Post-COVID World*, *Healthcare Management Forum*, Vol. 35(5) 301 – 309, 2022.
- 2021 **C. Getson** and G. Nejat, "Socially Assistive Robots Helping Older Adults through the Pandemic and Life after COVID-19," *Robotics* 2021, 10, 106.

Peer-Reviewed Conference Papers

- 2024 **C. Getson** and G. Nejat, "Investigating Persuasive Socially Assistive Robot Behavior Strategies for Sustained Engagement in Long-Term Care," 2024 IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN), Workshop on *HRI4WellBeing* (extended abstract)
- 2022 **C. Getson** and G. Nejat, "The Robot Screener Will See You Now: A Socially Assistive Robot for COVID-19 Screening in Long-Term Care Homes," 2022 IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN), Napoli, Italy, pp. 672 – 677.

SERVICE

- 2023 – 2024 Editorial Committee Volunteer, Canadian Science Policy Centre
2023 – 2024 Advisory Committee Volunteer, AGE-WELL
2022 Judge for the Undergraduate Engineering Research Day, U of T

PRESENTATIONS & INVITED TALKS

- August 2024 IEEE International Conference on Robot and Human Interaction (RO-MAN), HRI4WellBeing workshop presenter, *Investigating Persuasive Socially Assistive Robot Behavior Strategies for Sustained Engagement in Long-Term Care*
- May 2024 **Guest Lecturer** MIE 1070: Intelligent Robots for Society
Lecture on: *The Age of Social Robots*
- April 2024 **Tutorial Instructor** MIE443: Mechatronics Systems, Design & Integration
Developed and delivered a tutorial on robot emotions
- October 2023 AGE-WELL annual conference, presenter
Social Robots as Assistants: Assistive Persuasive Behaviours for Social Robots
- July 2023 Toronto Robotics Conference, University of Toronto Robotics Institute, presenter
The Design and Development of a Social Robot for COVID-19 Screening
- May 2023 The New Reality, Global News segment
How Tech is Helping Canadians Living with Dementia
- October 2022 Supply AI Conference, MaRS Discovery District, panelist
Robots Making Life Easier for Businesses Large and Small
- October 2022 AGE-WELL annual conference, poster session
The Adoption of Socially Assistive Robots for Long-Term Care
- September 2022 Revive & Thrive session for the Canadian College of Health Leaders, panelist
The adoption of socially assistive robots in long-term, private, and hospital care
- August 2022 IEEE International Conference on Robot and Human Interaction (RO-MAN), presenter, *The Robot Screener Will See You Now: A Socially Assistive Robot for COVID-19 Screening in Long-Term Care Homes*
- April 2022 AdvantAge Ontario annual conference, presenter
A Robot Screener in Long-Term Care Homes
- 2021, 2022 Roboethics Competition (<https://competition.raiselab.ca/>)
(Winner, RO-MAN 2021; Honourable Mention, ICRA 2022)

EXTRA-CURRICULAR (WWW.CRISTINAGETSONART.COM)

- 2019, 2020 Toronto Outdoor Art Fair (Toronto, ON, Canada)
- 2020 Art Palm Beach, Steidel Contemporary (Palm Beach, Florida, USA)
- 2019 Arta Gallery (Toronto, ON, Canada)
- 2019 Elaine Fleck Gallery (Toronto, ON, Canada)
- 2019 Blue Crow Gallery (Toronto, ON, Canada)
- 2018 Aqua Art Miami (Miami, Florida, USA)
- 2018 Texas Contemporary Art Fair (Houston, Texas, USA)
- 2018 Artist residency, Palazzo Monti (Brescia, Italy)
- 2017, 2018 Queen West Art Crawl (Toronto, ON, Canada)
- 2017, 2018 The Other Art Fair (Brooklyn, NY, USA)