

CRISTINA GETSON

PhD Candidate
Mechanical and Industrial Engineering
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I explore how people interact with social robots. Currently a PhD Candidate researching human-robot interaction, ethics, and AI in healthcare, with a focus on the design of social robots to assist vulnerable populations. A Graduate Fellow with the Schwartz Reisman Institute for Technology and Society, 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. **Research Specializations:** Human-robot interaction, social robotics, human-centered design, design for vulnerable populations, AI ethics, persuasive technology

EDUCATION

- 2020 – 2025 Doctor of Philosophy (Ph.D.), University of Toronto
Department of Mechanical and Industrial Engineering
Advisor: Dr. Goldie Nejat
Thesis: Development of a Framework for Social Robot Behaviors and Strategies in Human-Robot Interaction with Vulnerable Populations
Relevant courses: MIE1412: Human-Automation Interaction, MIE1070: Intelligent Robots for Society, TEP1203: Teaching Engineering in Higher Education
- 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

TEACHING EXPERIENCE

- Fall 2024 **Course Instructor**, ENG1101: Renaissance Engineering
1st year undergraduate class of 130 students
York University, Lassonde School of Engineering
- Spring 2024 **Guest Lecturer**, MIE 1070: Intelligent Robots for Society, University of Toronto
Graduate course lecture on: *The Age of Social Robots*

- Winter 2024 **Tutorial Instructor**, MIE443: Mechatronics Systems, Design & Integration
University of Toronto
- Winter 2021 – 2024 **Teaching Assistant**, MIE443: Mechatronics Systems, Design & Integration
University of Toronto

RESEARCH EXPERIENCE

- 2024 – present **Graduate Fellow**, Schwartz Reisman Institute for Technology and Society
- 2020 – present **Graduate Research Assistant**, Autonomous Systems and Biomechatronics Lab
Mechanical and Industrial Engineering, University of Toronto

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*, 25(8):105084, 2024.
- 2024 G. Nejat, A. Zehavi, **C. Getson** and H. Shoef, "Adoption of assistive technologies in long-term care homes: What the pandemic has taught us," *Healthcare Management Forum*, 37(6):418 – 422, 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*, 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* 10(3), 106, 2021.

Works in Progress

- Progress **C. Getson** and G. Nejat, "The Game Changer: The Role of Persuasive Socially Assistive Robots in the Sustained Engagement and Motivation of Older Adults in a Cognitive Activity," *in preparation for the International Journal of Social Robotics*, 2025.
- Progress J. Brecka, M. Collis, R. Gelpi, **C. Getson**, M. Mackley, J. Wilson, "Unpacking Trust: A Conceptual Analysis of How People Understand and Apply Trust in Artificial

Intelligence," in development as a whitepaper with the Schwartz Reisman Institute for Technology and Society, 2025.

Workshop Paper

- 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), 2024.

Peer-Reviewed Conference Proceedings

- Submitted **C. Getson** and G. Nejat, "The Role of Persuasive Socially Assistive Robot Behaviors in Engagement and Motivation of Older Adults in a Cognitive Activity," *submitted to the IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN)*, 2025.
- 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.

CONFERENCE PRESENTATIONS & INVITED TALKS

- March 2025 Schwartz Reisman Institute for Technology and Society Panel:
"Making Artificial Intelligence Real," presented at HEC Paris special session *Human-Robot Interactions with Vulnerable Populations*
- 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*
- October 2023 AGE-WELL annual conference, presenter
Social Robots as Assistants: Assistive Persuasive Behaviors 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)

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)

MENTORSHIP – University of Toronto

- 2023 - 2024 **Ruopei Chen**, Previous fourth-year Mechanical Engineering student. Now Master of Engineering student at Stanford. Advised on her undergraduate thesis developing an engagement measurement system using a social robot to engage older adults.
- 2023 **Victoria Vastis**, Previous Mechanical Engineering undergraduate summer student. Current Master of Integrated Innovation for Products & Services student at Carnegie Mellon. Advised her on a project for the design of an interactive cognitive game.
- 2021 – 2022 **Yuqian Zhou**, Previous fourth-year Engineering Science thesis student. Advised on her undergraduate thesis on improving robustness of face-mask detection in real world environments.

SERVICE

Workshop Committee

- 2025 “Designing Age-Inclusive Interfaces: Emerging Conversational and Generative AI to Support Interactions Across the Life Span,” the ACM Conversational User Interface (CUI) Conference, Waterloo, Canada, July 2025.

Outreach Activities

- 2023 – 2024 Editorial Committee Volunteer, Canadian Science Policy Centre
- 2023 – 2024 Advisory Committee Volunteer, AGE-WELL

- 2023 University of Toronto Engineering 150 Open House
Volunteer representing the Robotics Institute
- 2022 Judge for Undergraduate Engineering Research Day, University of Toronto

Peer-Reviewing

- 2025, 2022 Reviewer for IEEE International Conference on Robot and Human Interactive Communication (RO-MAN)
- 2025, 2023 Reviewer for Scientific Reports – Nature
- 2025 Reviewer for Transactions on Human-Robot Interaction
- 2025 Reviewer for IEEE Transactions on Robotics
- 2025 Reviewer for the Journal of Medical Internet Research (JMIR) Human Factors
- 2024 Reviewer for the International Journal of Social Robotics
- 2022 Reviewer for International Conference on Social Robotics (ICSR)

PREVIOUS 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
Researched, planned, created, and developed the School Division's first educational mobile apps on the iOS platform (in mathematics and early language learning)
- 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

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

CREATIVE PRACTICE (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)