

**AFFILIATIONS**

Ph.D Student, M.Sc.  
Computer Science  
University of Manitoba  
Winnipeg, Manitoba, Canada

**EDUCATION**

- 09/2015–PRESENT UNIVERSITY OF MANITOBA  
Ph.D., Computer Science, advisor: James E. Young  
“Visual interface techniques for maintaining team awareness in multi-robot teleoperation”
- 09/2012–01/2015 UNIVERSITY OF MANITOBA  
M.Sc., Computer Science, advisor: James E. Young  
“A simulated robot versus a real robot: an exploration of how robot embodiment impacts people’s empathic responses”
- 09/2006–10/2012 UNIVERSITY OF MANITOBA, CANADA  
B.C.Sc. Hons., Computer Science, specializations: Artificial Intelligence, Databases, Software Engineering

**PUBLICATIONS****Peer Reviewed Journal Publications**

- Stela H. Seo**, Keelin Griffin, James E. Young, Andrea Bunt, Susan Prentice, Veronica Loureiro-Rodríguez. “Investigating people’s rapport building and hindering behaviors when working with a collaborative robot,” *International Journal of Social Robotics*, vol.10, no.1, pp. 147-161, 2018. Springer.
- Denise Y. Geiskkovitch, **Stela H. Seo**, Derek Cormier, James E. Young. “Please continue, we need more data: an exploration of obedience to robots,” *Journal of Human Robot Interaction*, vol.5, no.1, pp. 82-99, 2015.
- Pak Ching Li, G. H. John van Rees, **Stela H. Seo**, Navin M. Singhi. “Friendship 3-hypergraphs,” *Discrete Mathematics*, vol. 312, no.11, pp. 1892-1899, 2012. Elsevier.

**Peer Reviewed Conference Full Papers**

- Elaheh Sanoubari, **Stela H. Seo**, Diljot S. Garcha, James E. Young, Verónica Loureiro-Rodríguez. “Good Robot Design or Machiavellian? An in-the-wild robot leveraging minimal knowledge of passersby’s culture,” *ACM/IEEE International Conference on Human-Robot Interaction, alt.HRI track*, March 2019. Daegu, Republic of Korea.
- Stela H. Seo**, James E. Young, Pourang Irani. “Where are the robots? In-feed embedded techniques for visualizing robot team member locations,” *IEEE International Symposium on Robot and Human Interactive Communication, RO-MAN*, August 2017. Lisbon, Portugal. [oral presentation by **Stela H. Seo**]
- Stela H. Seo**, Daniel J. Rea, Joel Wiebe, James E. Young. “Monocle: interactive detail-in-context using two pan-and-tilt cameras to improve teleoperation effectiveness,” *IEEE International Symposium on Robot and Human Interactive Communication, RO-MAN*, August 2017. Lisbon, Portugal. [oral presentation by **Stela H. Seo**]
- Daniel J. Rea, **Stela H. Seo**, Neil Bruce, James E. Young. “Movers, shakers, and those who stand still: visual attention-grabbing techniques in robot teleoperation,” *ACM/IEEE International Conference on Human-Robot Interaction*, March 2017. Vienna, Austria.
- Stela H. Seo**, Jihyang Gu, Seongmi Jeong, Keelin Griffin, James E. Young, Andrea Bunt, Susan Prentice. “Women and men collaborating with robots on assembly lines: designing a novel evaluation scenario for collocated human-robot teamwork,” *ACM International Conference on Human-Agent Interaction*, October 2015. Daegu, Republic of Korea. [oral presentation by **Stela H. Seo**]
- Stela H. Seo**, Denise Geiskkovitch, Masayuki Nakane, Corey King, James E. Young. “Poor thing! Would you feel sorry for a simulated robot? A comparison of empathy toward a physical and a simulated robot,” *ACM/IEEE International Conference on Human-Robot Interaction*, March 2015. Portland, Oregon, USA. [oral presentation by **Stela H. Seo**]
- Stela H. Seo**, Kazuki Takashima, Jim Young, Yoshifumi Kitamura. “Alerting users by animating content on a transforming tabletop interface,” *Human Interface Symposium, HIS*, September 2014. Kyoto, Japan. [oral presentation by **Stela H. Seo**]

Ashish Singh, **Stela H. Seo**, Yasmeeen Hashish, Masayuki Nakane, James E. Young, Andrea Bunt. “An interface for remote robotic manipulator control that reduces task load and fatigue,” *IEEE International Symposium on Robot and Human Interactive Communication, RO-MAN*, August 2013. Gyeongju, Republic of Korea. [oral presentation by **Stela H. Seo**]

Jacky Baltes, **Stela Seo**, Chi Tai Cheng, M.C. Lau, John Anderson. “Learning of facial gestures using SVMs,” *Next Wave in Robotics: Communications in Computer and Information Science*, vol. 212, pp. 147–154, 2011. Springer.

### Peer Reviewed Conference Extended Abstracts, Posters, Videos, Workshops

**Stela H. Seo**, James E. Young. “Picassnake: robot performance art,” *ACM/IEEE International Conference on Human-Robot Interaction, Video Presentations*, March 2017. Vienna, Austria.

Denise Geiskkovitch, **Stela H. Seo**, James E. Young. “Autonomy, embodiment, and obedience to robots,” *ACM/IEEE International Conference on Human-Robot Interaction, HRI Pioneers Workshop*, March 2015. Portland, Oregon, USA.

**Stela H. Seo**, James E. Young, Andrea Bunt. “Exploring the role of affect recognition in web-capable applications,” *Graphics Interface Conference, Poster Session*, May 2013. Regina, Saskatchewan, Canada.

### Non-peer Reviewed Publications

**Stela H. Seo**, James E. Young, and Andrea Bunt. “Exploring user attitudes toward affect recognition in web-capable applications,” *Technical Report*. 2012. University of Manitoba.

### RESEARCH EXPERIENCE

- 09/2012–PRESENT RESEARCH ASSISTANT (M.Sc. & Ph.D.)  
Human-Robot Interaction Laboratory, University of Manitoba  
supervisor: James E. Young
- 05/2014–09/2014 RESEARCH ASSISTANT (INTERNSHIP ABROAD)  
Interactive Content Design, Tohoku University  
supervisor: Yoshifumi Kitamura, James E. Young, and Kazuki Takashima
- 01/2014–06/2014 RESEARCH ASSISTANT (INDUSTRIAL COLLABORATION)  
09/2012–02/2013 Human-Robot Interaction Laboratory, University of Manitoba & Inuktun, BC  
supervisor: James E. Young
- 05/2012–08/2012 RESEARCH ASSISTANT  
Human-Robot Interaction Laboratory, University of Manitoba  
supervisor: James E. Young and Andrea Bunt
- 01/2012–04/2012 UNDERGRADUATE HONOURS PROJECT  
Human-Robot Interaction Laboratory, University of Manitoba  
supervisor: James E. Young
- 09/2011–12/2011 RESEARCH ASSISTANT (CO-OP WORK-TERM)  
Human-Robot Interaction Laboratory, University of Manitoba  
supervisor: James E. Young and Andrea Bunt
- 04/2009–08/2011 RESEARCH ASSISTANT  
Autonomous Agents Laboratory, University of Manitoba  
supervisor: John Anderson and Jacky Baltes
- 01/2010–04/2010 RESEARCH ASSISTANT (CO-OP WORK-TERM)  
Computational Discrete Mathematics Laboratory, University of Manitoba  
supervisor: John van Rees

### TEACHING EXPERIENCE

- 01/2018–04/2018 SESSIONAL INSTRUCTOR (COMP2160 PROGRAMMING PRACTICES)  
Computer Science, University of Manitoba  
course director: **Stela H. Seo**
- 09/2017–12/2017 SESSIONAL INSTRUCTOR (COMP2160 PROGRAMMING PRACTICES)  
Computer Science, University of Manitoba  
course director: Yang Wang

## Teaching Assistant in Computer Science, University of Manitoba

- COMP1010 INTRODUCTION TO COMPUTER SCIENCE (S'15 YOUNG)
- COMP1260 COMPUTER USAGE I (F'12 PENNER)
- COMP2140 DATA STRUCTURES AND ALGORITHMS (F'11 DUROCHER)
- COMP2160 PROGRAMMING PRACTICES (W'15 COOPER, F'14 BOYER & COOPER, F'13 ZAPP & BRAICO, F'11 BRAICO)
- COMP3010 DISTRIBUTED COMPUTING (S'12 BRAICO)
- COMP3020 HUMAN-COMPUTER INTERACTION I (F'13 YOUNG)
- COMP3350 SOFTWARE ENGINEERING I (W'13 BRAICO)
- COMP3430 OPERATING SYSTEMS (S'17 YOUNG, W'16 BRAICO, W'15 BOYER, W'14 YOUNG, W'13 YOUNG, W'12 GRAHAM)
- COMP4180 INTELLIGENT MOBILE ROBOTICS (F'11 BALTES)
- COMP4360 MACHINE LEARNING (W'12 BALTES)

## INDUSTRY EXPERIENCE

- 05/2011–08/2011 SOFTWARE DEVELOPER (CO-OP WORK TERM)  
Taibotics, Kaohsiung, Taiwan
- 09/2010–05/2011 WEB APPLICATION DEVELOPER  
Manitoba Centre of Health Policy, University of Manitoba
- 02/2009–06/2009 JAPANESE LANGUAGE TUTOR  
Manitoba Japanese Canadian Cultural Centre

## AWARDS (All values are quoted in Canadian Dollars)

### Academic Awards

- 09/2016–PRESENT POSTGRADUATE SCHOLARSHIPS-DOCTORAL (PGS-D), \$63,000  
Natural Sciences and Engineering Research Council of Canada  
national, academic
- 09/2015–PRESENT CS ENTRANCE AWARD (A.K.A. GUARANTEED FUNDING PACKAGE), \$80,000 (reduced to \$39,500 due to the funding limit)  
Department of Computer Science, University of Manitoba  
institutional, academic
- 09/2015–08/2016 UNIVERSITY OF MANITOBA GRADUATE FELLOWSHIP (UMGF), \$18,000 PER YEAR  
Faculty of Graduate Studies, University of Manitoba  
institutional, academic [discontinued after receiving NSERC PGS-D]
- 09/2012–08/2014 CS ENTRANCE AWARD (A.K.A. GUARANTEED FUNDING PACKAGE), \$32,000  
Computer Science, University of Manitoba  
institutional, academic
- 2009, 2011 DEAN'S HONOUR LIST  
Faculty of Science, University of Manitoba  
institutional, academic

### International competitions

- 05/2016 ROBOTART COMPETITION (Team 6<sup>th</sup> Place) using Picassnake, \$5,000  
RobotArt Organization (<http://robotart.org>)
- 08/2011 MARATHON (Team 2<sup>nd</sup> Place) using DARwIn  
HuroCup – Humanoid Robot Competition  
Federation of International Robot-soccer Association (FIRA) Competition, Kaohsiung, Taiwan
- 10/2010 CHAMPION AWARD (Team 1<sup>st</sup> Place)  
Humanoid Robot Explorer Competition International Group  
Micro-mouse & Robot Contest, Southern Taiwan University, TaiNan, Taiwan

### Student Volunteering Awards

03/2015	HRI 2015	\$650.00
08/2013	ROMAN 2013	\$450.00

### Travel Awards/Supports

08/2017	ROMAN 2017	\$1000.00	Faculty of Graduate Studies, University of Manitoba
08/2017	ROMAN 2017	\$700.00	Computer Science & Faculty of Science, University of Manitoba
08/2017	ROMAN 2017	\$750.00	Graduate Student Association, University of Manitoba
03/2017	HRI 2017	\$700.00	Computer Science & Faculty of Science, University of Manitoba
10/2015	HAI 2015	\$1000.00	Faculty of Graduate Studies, University of Manitoba
10/2015	HAI 2015	\$700.00	Computer Science & Faculty of Science, University of Manitoba
10/2015	HAI 2015	\$705.92	Graduate Student Association, University of Manitoba
03/2015	HRI 2015	\$750.00	Faculty of Graduate Studies, University of Manitoba
03/2015	HRI 2015	\$700.00	Computer Science & Faculty of Science, University of Manitoba
03/2015	HRI 2015	\$392.69	Graduate Student Association, University of Manitoba
09/2014	HIS 2014	\$700.00	Computer Science & Faculty of Science, University of Manitoba
09/2014	HIS 2014	\$650.00	Research Institute of Electrical Communication, Tohoku University
08/2013	ROMAN 2013	\$700.00	Computer Science & Faculty of Science, University of Manitoba
08/2013	ROMAN 2013	\$325.00	Graduate Student Association, University of Manitoba
05/2013	GI 2013	\$500.00	Computer Science & Faculty of Science, University of Manitoba

### ACADEMIC SERVICE

Conference Chair	Student Volunteer co-chair at <i>Human-Robot Interaction</i> (HRI 2017) Web chair at <i>Next Generation Human-Agent Interaction</i> (NGHAI 2016, 2017) Human-Agent Interaction Workshop
Paper Review	Human-Robot Interaction (HRI 2016, 2017, 2018, 2019) Robots and Human Interactive Communications (RO-MAN 2015, 2016, 2017, 2018) Human Factors in Computing Systems (CHI 2017) Human-Agent Interaction (HAI 2017, 2018) Graphics Interface (GI 2015, 2019) Advances in Computer Entertainment Technology (ACE 2017) Tangible Embedded and Embodied Interaction (TEI 2016, 2019) 3D User Interfaces (3DUI 2017) Spatial User Interaction (SUI 2014, 2016)
Outreach Staff	“Picassnake: robot performance art,” <i>Science Rendezvous</i> , 2016, Manitoba, Canada.
Tech. Consultant	Seema Goel. “To Move As One,” <i>Art Gallery of Southwestern Manitoba</i> , 2016. Brandon, Manitoba, Canada
Media Attention	Stela H. Seo. “Would you feel sorry for a simulated robot? Study shows people empathize more with the real thing,” <i>Robohub</i> ( <a href="http://robohub.org">http://robohub.org</a> ), 2015.

### LANGUAGES

Korean	native
English	fluent conversational, reading, and writing
Japanese	fluent conversational, advanced reading, and intermediate writing

### PERSONAL

interest in developing programs, video games, Japanese animations, building a plastic model, photography, Rubik’s cubes, puzzles, Sudoku, learning instruments (harmonica, guitar, piano)

Winnipeg, Manitoba, Canada. (January 23, 2019)