

**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*, 2017. 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, 2015, pp. 82-99.
- Pak Ching Li, G. H. John van Rees, **Stela H. Seo**, Navin M. Singhi. “Friendship 3-hypergraphs,” *Discrete Mathematics*, vol. 312, no.11, 2012, pp. 1892-1899. Elsevier.

**Peer Reviewed Conference Full Papers**

- 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*, 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*, 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 tele-operation,” *ACM/IEEE International Conference on Human-Robot Interaction*, 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*, 2015. Daegu, Kyungpook, 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*, 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*, 2014. Kyoto, Japan. [oral presentation by **Stela H. Seo**]
- Ashish Singh, **Stela H. Seo**, Yasmeen 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*, 2013. Gyeongju, Korea. [oral presentation by **Stela H. Seo**]

Jacky Baltès, **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, 2011, pp. 147–154. 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*, 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*, 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*, 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 Baltès
- 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), \$70,000 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]
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 ( <a href="http://robotart.org">http://robotart.org</a> )
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
08/2013	ROMAN 2013	\$450

### Travel Awards/Supports

08/2017	ROMAN 2017	\$1000	Faculty of Graduate Studies, University of Manitoba
08/2017	ROMAN 2017	\$700	Computer Science & Faculty of Science, University of Manitoba
08/2017	ROMAN 2017	\$750	Graduate Student Association, University of Manitoba
03/2017	HRI 2017	\$700	Computer Science & Faculty of Science, University of Manitoba
10/2015	HAI 2015	\$1000	Faculty of Graduate Studies, University of Manitoba
10/2015	HAI 2015	\$700	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	Faculty of Graduate Studies, University of Manitoba
03/2015	HRI 2015	\$700	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	Computer Science & Faculty of Science, University of Manitoba
09/2014	HIS 2014	\$650	Research Institute of Electrical Communication, Tohoku University
08/2013	ROMAN 2013	\$700	Computer Science & Faculty of Science, University of Manitoba
08/2013	ROMAN 2013	\$325	Graduate Student Association, University of Manitoba
05/2013	GI 2013	\$500	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) Robots and Human Interactive Communications (RO-MAN 2015, 2016, 2017) Human Factors in Computing Systems (CHI 2017) Human-Agent Interaction (HAI 2017) Graphics Interface (GI 2015) Advances in Computer Entertainment Technology (ACE 2017) Tangible Embedded and Embodied Interaction (TEI 2016) 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 16, 2018)