

AFFILIATIONS

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

EDUCATION

- 09/2015–**Present** UNIVERSITY OF MANITOBA, CANADA
Ph.D., Department of Computer Science, Faculty of Graduate Studies
advisor: Dr. James E. Young
- 09/2012–05/2015 UNIVERSITY OF MANITOBA, CANADA
M.Sc., Department of Computer Science, Faculty of Graduate Studies
thesis title: “*A simulated robot versus a real robot:
an exploration of how robot embodiment impacts people's empathic responses*”
thesis defended in January 2015
advisor: Dr. James E. Young
- 09/2006–10/2012 UNIVERSITY OF MANITOBA, CANADA
B.C.Sc. Hons., Department of Computer Science, Faculty of Science
specializations: Artificial Intelligence, Databases, and Software Engineering

RESEARCH EXPERIENCE

- 09/2015–**Present** RESEARCH ASSISTANT (Ph.D.)
Human-Robot Interaction Laboratory, University of Manitoba
supervisor: Dr. James E. Young
- 01/2015–08/2015 RESEARCH ASSISTANT
Human-Robot Interaction Laboratory, University of Manitoba
supervisor: Dr. James E. Young
- 09/2012–01/2015 RESEARCH ASSISTANT (M.Sc.)
Human-Robot Interaction Laboratory, University of Manitoba
supervisor: Dr. James E. Young
- 05/2014–09/2014 RESEARCH ASSISTANT
Interactive Content Design, Tohoku University
supervisor: Dr. Yoshifumi Kitamura, Dr. James E. Young, and Dr. Kazuki Takashima
- 01/2014–06/2014 RESEARCH ASSISTANT
09/2012–02/2013 Human-Robot Interaction Laboratory, University of Manitoba & Inuktun, BC
supervisor: Dr. James E. Young
- 05/2012–08/2012 RESEARCH ASSISTANT
Human-Robot Interaction Laboratory, University of Manitoba
supervisor: Dr. James E. Young and Dr. Andrea Bunt
- 01/2012–04/2012 UNDERGRADUATE HONOURS PROJECT
Human-Robot Interaction Laboratory, University of Manitoba
supervisor: Dr. James E. Young
- 09/2011–12/2011 RESEARCH ASSISTANT (Co-op Work-Term)
Human-Robot Interaction Laboratory, University of Manitoba
supervisor: Dr. James E. Young and Dr. Andrea Bunt

- 04/2009–08/2011 RESEARCH ASSISTANT
Autonomous Agents Laboratory, University of Manitoba
supervisor: Dr. John Anderson and Dr. Jacky Baltes
- 01/2010–04/2010 RESEARCH ASSISTANT (Co-op Work-Term)
Computational Discrete Mathematics, University of Manitoba
supervisor: Dr. John van Rees

PUBLICATIONS

Refereed Journals – Peer Reviewed Papers

Geiskkovitch, D.Y., **Seo, S.H.**, Cormier, D., Young, J.E. “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.

Li, P.C., van Rees, G.H.J., **Seo, S.H.**, Singhi, N.M. “Friendship 3-hypergraphs,” *Discrete Mathematics*, vol. 312, no.11, 2012, pp. 1892-1899. Elsevier.

Refereed Conferences – Peer Reviewed Papers

Stela H. Seo, James E. Young, and Pourang Irani, “Where are the robots? In-feed embedded techniques for visualizing robot team member locations,” *In proceedings of the 26th IEEE international conference 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, and James E. Young, “Monocle: Interactive Detail-in-Context Using Two Pan-and-Tilt Cameras to Improve Teleoperation Effectiveness,” *In proceedings of the 26th IEEE international conference 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,” *In proceedings of the 12th ACM/IEEE international conference on Human-Robot Interaction, HRI’2017*, Vienna, Austria.

Stela H. Seo, Jihyang Gu, Seongmi Jeong, Keelin Griffin, James E. Young, Andrea Bunt, and Susan Prentice. 2015. “Women and men collaborating with robots on assembly lines: designing a novel evaluation scenario for collocated human-robot teamwork,” *In proceedings of the third international conference on Human-Agent Interaction, HAI ’2015*. ACM, 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,” *In proceedings of the 10th ACM/IEEE international conference on Human-Robot Interaction, HRI’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,” *In proceedings of 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,” *In proceedings of the 22nd IEEE international conference on Robot and Human Interactive Communication, RO-MAN’2013*, pp. 738-743. Gyeongju, 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*, 2011, vol. 212, pp. 147–154. Springer.

Refereed Conferences – Peer Reviewed Extended Abstracts, Posters, Videos

Stela H. Seo, James E. Young. "Picassnake: Robot Performance Art," *In the adjunct proceedings of the 12th ACM/IEEE international conference on Human-Robot Interaction, HRI'2017*, Video Presentations, Vienna, Austria.

Denise Geiskovitch, **Stela H. Seo**, James E. Young. "Autonomy, Embodiment, and Obedience to Robots," *In the adjunct proceedings of the 10th ACM/IEEE international conference on Human-Robot Interaction, HRI'2015*, HRI Pioneers Workshop, Portland, Oregon, USA.

Stela H. Seo, James E. Young, Andrea Bunt. "Exploring the Role of Affect Recognition in Web-Capable Applications," *In the adjunct proceedings of Graphics Interface (poster session), GI'2013*, Regina, Saskatchewan, Canada.

Non-refereed Publications

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

ACADEMIC SERVICE

Conf. Chair	Student Volunteer co-chair at Human-Robot Interaction (HRI 2017), Web chair at Next Generation Human-Agent Interaction (NGHAI 2016)
Paper Review	Human-Robot Interaction (HRI 2016, 2017), Robots and Human Interactive Communications (RO-MAN 2015, 2016), Human Factors in Computing Systems (CHI 2017), Graphics Interface (GI 2015), Tangible Embedded and Embodied Interaction (TEI 2016), 3D User Interfaces (3DUI 2017), Spatial User Interaction (SUI 2014)
Tech. Consultant	Seema Goel, 2016, "To Move As One," Art Gallery of Southwestern Manitoba, Brandon, Manitoba, Canada
Media Attention	Robohub (http://robohub.org), 2015, "Would you feel sorry for a simulated robot? Study shows people empathize more with the real thing"

AWARDS (All values are quoted in Canadian Dollars)

09/2016-Present	POSTGRADUATE SCHOLARSHIPS-DOCTORAL (PGS-D), \$21,000 per year Natural Sciences and Engineering Research Council of Canada national, academic
09/2015-Present	GUARANTEED FUNDING PACKAGE (GFP), \$17,500 per year Computer Science & Faculty of Science, University of Manitoba institutional, academic
04/2016-05/2016	ROBOTART COMPETITION (Team 6 th Place) using Picassnake, \$5,000 RobotArt Organization (http://robotart.org) international, competition
09/2015-08/2016	UNIVERSITY OF MANITOBA GRADUATE FELLOWSHIP (UMGF), \$18,000 per year Faculty of Graduate Studies, University of Manitoba institutional, academic

- 09/2012–08/2014 GUARANTEED FUNDING PACKAGE (GFP), \$16,000 per year
Computer Science, University of Manitoba
institutional, academic
- 08/2011 MARATHON using DARwIn (Team 2nd Place)
HuroCup – Humanoid Robot Competition
Federation of International Robot-soccer Association, Kaohsiung, Taiwan
international, competition
- 10/2010 CHAMPION AWARD (Team 1st Place)
Humanoid Robot Explorer Competition International Group
Micro-mouse & Robot Contest, Southern Taiwan University, TaiNan, Taiwan
international, competition
- 2009, 2011 DEAN’S HONOUR LIST
Faculty of Science, University of Manitoba
institutional, academic

Student Volunteering Awards (All values are quoted in Canadian Dollars)

- 03/2015 HRI 2015, \$650
08/2013 ROMAN 2013, \$450

Travel Awards/Supports (All values are quoted in Canadian Dollars)

- 11/2017 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

TEACHING EXPERIENCE

Teaching Assistant in Computer Science, University of Manitoba

- Comp 1010 Introduction to Computer Science. Summer 2015
Comp 1260 Computer Usage I. Fall 2012
Comp 2140 Data Structures and Algorithms. Fall 2011
Comp 2160 Programming Practices. Winter 2015, Fall 2014, Fall 2013, Fall 2011
Comp 3010 Distributed Computing. Summer 2012
Comp 3020 Human-Computer Interaction I. Fall 2013
Comp 3350 Software Engineering I. Winter 2013
Comp 3430 Operating Systems. Winter 2016, Winter 2015, Winter 2014, Winter 2013, Winter 2012
Comp 4180 Intelligent Mobile Robotics. Fall 2011
Comp 4360 Machine Learning. Winter 2012

- 02/2009–06/2009 LANGUAGE TUTOR, JAPANESE
Manitoba Japanese Canadian Cultural Centre

WORKING EXPERIENCE

- 05/2011–08/2011 SOFTWARE DEVELOPER (Co-op Work Term)
Taibotics, Kaohsiung, Taiwan
manager: Dr. Jacky Baltes
- 09/2010–05/2011 WEB APPLICATION DEVELOPER
Manitoba Centre of Health Policy, University of Manitoba
manager: Mark Smith

REFERENCES

- Dr. James E. Young Assistant Professor, Computer Science, University of Manitoba
+1-204-474-6791, young@cs.umanitoba.ca
relationship: thesis supervisor
- Dr. Andrea Bunt Associate Professor, Computer Science, University of Manitoba
+1-204-474-8688, bunt@cs.umanitoba.ca
relationship: research assistant supervisor

LANGUAGES

- Korean native speaker
English fluent conversational, fluent reading and writing
Japanese fluent conversational, advanced reading and intermediated writing

PERSONAL

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

Winnipeg, Manitoba, Canada. (August 22, 2017)