

## AFFILIATIONS

ASSISTANT PROFESSOR  
University of Manitoba  
Winnipeg, Manitoba, Canada, R3T 2N2

VISITING RESEARCHER  
University of Tokyo

## RESEARCH INTERESTS

human-robot interaction (HRI), human-computer interaction (HCI), domestic robots, social human-robot interaction, leveraging human emotion, HRI evaluation, tabletop HRI interfaces, interactive graphics, tangible user interfaces, mixed reality, computer vision for HCI, video game interfaces, novel music interfaces

## EDUCATION

09/2005–08/2010 UNIVERSITY OF CALGARY, CANADA  
PhD, Department of Computer Science, Faculty of Science  
thesis title: “Exploring Social Interaction Between Robots and People,”  
supervisors: Dr. Ehud Sharlin, Dr. Takeo Igarashi (University of Tokyo)

09/2000–04/2005 VANCOUVER ISLAND UNIVERSITY, CANADA  
BSc, Department of Computer Science  
senior project: “the development of an agent-based procedural modeling system”

## RESEARCH EXPERIENCE

09/2005–08/2010 RESEARCH ASSISTANT  
Interactions Laboratory, University of Calgary  
supervisor: Dr. Ehud Sharlin

09/2005–08/2010 RESEARCH ASSISTANT  
Interactions Laboratory, University of Calgary  
supervisor: Dr. Ehud Sharlin

09/2009–01/2010 RESEARCH INTERNSHIP  
JST/ERATO Design Interface Project, Japan  
“A Dog-Leash Interface for Leading a Robot”, primary investigator  
supervisor: Dr. Takeo Igarashi

05/2008–07/2008 RESEARCH INTERNSHIP  
JST/ERATO Design Interface Project, Japan  
“Designing Interactive Robot Behavior by Demonstration”, primary investigator  
supervisor: Dr. Takeo Igarashi

06/2007–08/2007 RESEARCH INTERNSHIP  
Igarashi User Interface Group, University of Tokyo, Japan  
“Designing Reactive Character Behavior by Demonstration”, primary investigator  
supervisor: Dr. Takeo Igarashi

## TEACHING EXPERIENCE

01/2007–present INTERNSHIP ADVISOR, INTE 503  
Internship 503, Computer Science Internship Program  
developed feedback program, grading and advising on internship reports  
University of Calgary, supervisor: Dr. Ehud Sharlin

01/2009–04/2009 INSTRUCTOR, SENG 513  
Software Engineering 513: Web-Based Systems (sole instructor)  
redesigned and taught course, coordinated teaching assistant  
University of Calgary

09/2008–12/2008 DEVELOPMENT ADVISOR, CPSC 701.21  
Computer Science 701.21: Advanced Topics in Human Robot Interaction  
course development, special-topics lectures  
University of Calgary, supervisor: Dr. Ehud Sharlin

01/2008–04/2008 DEVELOPMENT ADVISOR, CPSC 535/635  
Computer Science 535/635: Image Analysis and Computer Vision  
course development, creating both assignments and marking schemes  
University of Calgary, supervisor: Dr. Jeff Boyd

09/2007–12/2007 TEACHING ASSISTANT, CPSC 535/635  
Computer Science 535/635: Image Analysis and Computer Vision  
planning, designing and teaching labs, marking assignments  
University of Calgary, supervisor: Dr. Jeff Boyd

01/2006–04/2006 DEVELOPMENT ADVISOR, CPSC 599.17/601.17  
Computer Science 599.17/601.17: Human-Robot Interaction  
lab creation and development, tutorials and support, special-topics lectures  
University of Calgary, supervisor: Dr. Ehud Sharlin

09/2005–04/2006 TEACHING ASSISTANT, CPSC 491  
Computer Science 491: Human-Computer Interaction  
planning and teaching labs, marking assignments  
University of Calgary, supervisors: Dr. Ehud Sharlin, James Tam

## AWARDS (partial list)

2010 QUEEN ELIZABETH II SCHOLARSHIP, \$5,000  
University of Calgary

2010–2012	JSPS POSTDOCTORAL FELLOWSHIP, total value \$114,000 international, research (University of Tokyo)
2009	JSPS POSTDOCTORAL FELLOWSHIP (short term), \$13,000 international, research (University of Tokyo)
2009	GRADUATE TEACHING FELLOWSHIP, \$3,000 University of Calgary
2007, 2008, 2009	NSERC POSTGRADUATE SCHOLARSHIP (PGS-D), \$21,000 / year national, academic
2007, 2008, 2009	iCORE PHD GRADUATE SCHOLARSHIP, \$15,000 / year provincial, academic
2006, 2007, 2008	DEPARTMENTAL RESEARCH AWARD, \$8,000 each Department of Computer Science, University of Calgary declined due to funding cap
2006, 2007	DEAN'S RESEARCH EXCELLENCE AWARD, \$3,000 / year University of Calgary
2007	NSERC / JSPS SUMMER PROGRAM IN JAPAN, \$11,500 national/international, research (University of Tokyo)
2006	NSERC CANADA GRADUATE SCHOLARSHIP (CGS-M), \$17,500 national, academic
2006	iCORE MSc GRADUATE SCHOLARSHIP, \$12,000 provincial, academic
2005	DEPARTMENTAL RESEARCH AWARD, \$6,000 Department of Computer Science, University of Calgary
2002	ASSOC. OF INT. EDUCATION JAPAN (AIEJ) SCHOLARSHIP, \$14,000 international, academic
2002	BC ASIA PACIFIC AWARD, \$5,000 provincial, academic

## PUBLICATIONS

### JOURNALPAPERS

- [J.2] JAMES E. YOUNG, JaYoung Sung, Amy Volda, Ehud Sharlin, Takeo Igarashi, Henrik I. Christensen, and Rebecca E. Grinter. Evaluating Human-Robot Interaction: Focusing on the Holistic In-

teraction Experience. Under review in the International Journal of Social Robotics. International Journal on Social Robotics, to appear. Springer

- [J.1] JAMES E. YOUNG, Richard Hawkins, Ehud Sharlin, and Takeo Igarashi. Toward Acceptable Domestic Robots: Applying Insights from Social Psychology. Inaugural Issue of the International Journal on Social Robotics 1(1):95–108 (Jan 2009). Springer.

#### REFEREED CONFERENCE FULL PAPERS

- [C.6] Nicolai Marquardt, Miguel A. Nacenta, JAMES E. YOUNG, Sheelagh Carpendale, Saul Greenberg, and Ehud Sharlin. The haptic tabletop puck: providing haptic feedback for interactive tabletops. To appear in proceedings of the ACM International Conference on Tabletops and Interactive Surfaces, 2009. ACM Tabletop '09, Banff, Canada, November 23–25, 2009. ACM, ACM Press. *Shared in high-level project direction, paper revisions, preliminary direction and design critique.*
- [C.5] Cheng Guo, JAMES E. YOUNG, and Ehud Sharlin. Touch and Toys: new techniques for interaction with a remote group of robots. In proceedings of the ACM Conference on Human Factors in Computing Systems, 2009. ACM CHI '09, Boston, US, April 4–9, pages 491–500, 2009. ACM, ACM Press. *Shared in project design and technical implementation, primary author on paper writing and lead on study analysis. Oral presentation by Young.*
- [C.4] JAMES E. YOUNG, Takeo Igarashi, and Ehud Sharlin. Puppet Master: Designing Reactive Character Behavior by Demonstration. In proceedings of the ACM SIGGRAPH / Eurographics Symposium on Computer Animation, 2008. ACM SIGGRAPH / Eurographics SCA '08, Dublin, Ireland, July 7–9, pages 183–191, 2008. Eurographics Association, Eurographics Association Press. *Oral presentation by Young.*
- [C.3] JAMES E. YOUNG, Min Xin, and Ehud Sharlin. Robot Expressionism Through Cartooning. In proceedings of the ACM/IEEE International Conference on Human-Robot Interaction, 2007. ACM HRI '07, Washington DC, USA, March 9–11, pages 309–316, 2007. ACM, ACM Press *Oral presentation by Young.*
- [C.2] JAMES E. YOUNG, Ehud Sharlin, and Jeffrey E. Boyd. Implementing Bubblegrams: The Use of Haar-like Features for Human-Robot Interaction. In proceedings of the IEEE Conference on Automation Science and Engineering, 2006. IEEE CASE '06, Shanghai, China, October 8–10, pages 308–313, 2006. IEEE Computer Society Press. *Oral presentation by Young.*
- [C.1] JAMES E. YOUNG and Ehud Sharlin. Sharing Spaces with Robots: an Integrated Environment for Human-Robot Interaction. In proceedings of the International Symposium on Intelligent Environments, 2006. ISIE '06, Cambridge, UK, April 5–7, pages 103–110, 2006. Microsoft Research Ltd. Press. *Oral presentation by Young.*

#### REFEREED CONFERENCE SHORT-PAPERS, EXTENDED ABSTRACTS, DEMOS

- [CO.7] JAMES E. YOUNG, Kentaro Ishii, Takeo Igarashi, Ehud Sharlin. Style-by-Demonstration: Using Broomsticks and Tangibles to Show Robots How to Follow People. In adjunct proceedings

(Late-Breaking Reports) of the ACM/IEEE International Conference on Human-Robot Interaction, 2010. HRI '10 Late-Breaking Reports, Osaka, Japan, March 2–5, 2010. ACM, ACM Press *Poster presentation by Young*.

- [CO.6] JAMES E. YOUNG, Daisuke Sakamoto, Takeo Igarashi, Ehud Sharlin. Puppet Master: A technique for defining the actions of interactive agents by demonstration. Human-Agent Interaction (HAI) Symposium 2009, Dec. 2009, Tokyo. ( in Japanese)
- [CO.5] Nicolai Marquardt, JAMES E. YOUNG, Ehud Sharlin, Saul Greenberg. Situated Messages for Asynchronous Human-Robot Interaction. In adjunct proceedings of the ACM/IEEE International Conference on Human-Robot Interaction (Late-Breaking Abstracts). HRI '09, San Diego, California, US, March 11–13, 2009. 2 pages. *Poster presentation, Marquardt and Young*.
- [CO.4] JAMES E. YOUNG, Ehud Sharlin, Takeo Igarashi. The Concept of a Robot. In proceedings of the HRI Pioneers Workshop, 2008. Conducted at HRI '08, Amsterdam, The Netherlands, March 12–15, 2008. 2 pages.
- [CO.3] JAMES E. YOUNG, Gregor McEwan, Saul Greenberg and Ehud Sharlin. Moving a Media Space into the Real World through Group–Robot Interaction. In video session and in adjunct proceedings of the 5th International Conference on Pervasive Computing, 2007. Pervasive '07, Toronto, Canada, May 13–15, 2007. Video 1:50, paper 4 pages. *Poster presentation by Young*.
- [CO.2] JAMES E. YOUNG, Neko Young, Saul Greenberg and Ehud Sharlin. Feline Fun Park: A Distributed Tangible Interface for Pets and Owners. In video session and in adjunct proceedings of the 5th International Conference on Pervasive Computing, 2007. Pervasive '07, Toronto, Canada, May 13–15, 2007. Video 1:13, paper 4 pages. *Poster presentation by Young*.
- [CO.1] JAMES E. YOUNG, Gregor McEwan, Saul Greenberg, and Ehud Sharlin. AIBO Surrogate – A Group-Robot Interface. Demonstration at ACM Computer Supported Cooperative Work, 2006. ACM CSCW '06, Banff, Canada, November 4–8, 2006. *Demonstration by Young*.

#### BOOK CHAPTERS

- [B.1] JAMES E. YOUNG, Ehud Sharlin, Takeo Igarashi. What is Mixed Reality, anyway? Considering the boundaries of mixed reality in the context of robots. To appear in *Mixed Reality and Human-Robot Interaction*, Springer (invited).

#### INVITED RESEARCH SEMINARS

- [IS.7] “Puppet Master, and Emerging Research Questions in Social Human Robot Interaction,” University of Manitoba, Departmental Seminar, Department of Computer Science. July 2010.
- [IS.6] “Sociable Robotics,” Tokyo Denki University, OSOITE Lab, School of Science and Technology for Future Life. May 25, 2008. *Presentation in Japanese*.
- [IS.5] “Demonstrating Interactive Characters,” Japan Society for the Promotion of Science, Canadian Representative at JSPS Summary Ceremonies. August 21, 2007.

- [IS.4] “Demonstrating Interactive Characters,” Osaka University, Human Interface Engineering Lab, Department of Multimedia Engineering. August 17, 2007.
- [IS.3] “Sociable Human-Robot Interaction,” Vancouver Island University, Departmental Seminar, Department of Computing Science. February 17, 2007.
- [IS.2] “Robot Expression through Cartooning,” Osaka University, Human Interface Engineering Lab, Department of Multimedia Engineering. October 14, 2006.
- [IS.1] “Robot Expression through Cartooning,” University of Tokyo, User Interface Research Group, Igarashi Laboratory, Department of Computer Science. October 13, 2006.

#### NON-REFEREED TECHNICAL REPORTS

- [T.2] Dustin van Gerven and *JAMES E. YOUNG*. Ergonomic Music: Where Does it Fit In? Departmental technical report 2007-850-02, 2007, University of Calgary, Calgary, AB, Canada.
- [T.1] Daniel Val Dale, *JAMES E. YOUNG*, and Ehud Sharlin. Extracting Emotion From Movement: Representing Interactions as Glyphs. Departmental technical report 2009-947-26, 2009, University of Calgary, Calgary, AB, Canada.

#### FULL-PAPER SUBMISSIONS IN PREPARATION

- [P.3] *JAMES E. YOUNG*, Kentaro Ishii, Takeo Igarashi, Ehud Sharlin. Puppet Master to Robots – exploring in-depth programming style by demonstration.
- [P.2] *JAMES E. YOUNG*, Ehud Sharlin, Takeo Igarashi. Evaluating Programming by Demonstration for Robotic Style.
- [P.1] *JAMES E. YOUNG*, Juliane Reichenbach, Takeo Igarashi. A dog-leash interface for human-robot interaction.

#### POPULAR PRESS COVERAGE

- [Pr.4] John Bolton. “Cornwall Today,” (live interview regarding social robotics), Corus Radio (CJUL), Cornwall, Ontario, November 26, 2007.
- [Pr.3] Shannon Montgomery. “Researchers try to make robots approachable, not creepy” – re Jeeves [C.3], The Canadian Press (CBC Technology News), November 14th, 2007. Archived online at [<http://jimyoung.ca/Papers/CanadianPress07.pdf>].
- [Pr.2] Mark Medley. “In future, everything will be a computer,” mention, re – Feline Fun Park [CO.2], National Post, May 19, 2007. Archived online at [<http://jimyoung.ca/Papers/NationalPost07.pdf>].
- [Pr.1] Celeste Bieber. “Another uncanny valley,” mention, re – Jeeves [C.3], New Scientist Technology Blog, March 26, 2007. Archived online at [<http://jimyoung.ca/Papers/TechnologyBlog07.pdf>].

#### UNDERGRADUATE SUPERVISION

- 01/2009–09/2009 Daniel Van Dale – “Visualization of Emotive Social Interactions,” University of Calgary co-supervised by Dr. Ehud Sharlin

01/2006–04/2006 Sergio Pichardo – “A Mixed-Reality Human-Robot Interface,” University of Calgary  
co-supervised by Dr. Ehud Sharlin

## ACADEMIC SERVICE

SYMPOSIUM CHAIR – Poster & Demo Co-Chair, Teaser Session Chair, ACM Symposium on Virtual Reality and Software Technology, VRST 2009.

PROGRAM COMMITTEE – Canadian Conference on Computer and Robot Vision, CRV 2009.

REVIEWER – Approx. 15 manuscripts per year. ACM Advances in Computer Entertainment Technology, ACE 2010. Computer and Robot Vision, CRV 2010, ACM Interactive Tabletops and Surfaces, Tabletop 2009–2010. ACM International Conference on Multimodal Interfaces, ICMI 2009. ACM Conference on Human Factors in Computing Systems, ACM CHI 2010. ACM CHI Work-In-Progress 2009–2010. ACM/IEEE Conference on Human-Robot Interaction, HRI 2008–2010. ACM Conference on Tangible and Embedded Interaction, TEI 2008–2010. IEEE Tabletops and Interactive Surfaces, TEI 2008. CMCCC Graphics Interface, GI 2007–2010. IEEE Three-Dimensional User Interfaces, 3DUI 2006.

STUDENT VOLUNTEER – International Conference on Pervasive Computing 2007. ACM/IEEE Conference on Human-Robot Interaction, HRI 2006. ACM Computer Supported Cooperative Work, CSCW 2006.

SESSION CO-CHAIR – IEEE Conference on Automation Science and Engineering, CASE 2006.

## REFERENCES

- Dr. Ehud Sharlin Associate Professor, Department of Computer Science, University of Calgary  
+1.403.210.9404, ehud@cpsc.ucalgary.ca  
relationship: PhD thesis co-supervisor, teaching reference
- Dr. Takeo Igarashi Associate Professor, Department of Computer Science, University of Tokyo  
+81.3.5841.4109, takeo@acm.org  
relationship: PhD thesis co-supervisor
- Dr. Saul Greenberg Professor, Department of Computer Science, University of Calgary  
+1.403.220.6087, saul.greenberg@ucalgary.ca  
relationship: PhD thesis committee member
- Dr. Jeffrey Boyd Associate Professor, Department of Computer Science, University of Calgary  
+1.403.220.6038, boyd@cpsc.ucalgary.ca  
relationship: teaching reference, research collaboration

## LANGUAGES

English	native speaker
Japanese	fluent conversational, advanced reading and writing
Korean	beginner / hobbyist

## PERSONAL

interest in puzzles, debates, foreign languages

husband to Aya and caretaker of our cat, Neko

Calgary, September 25, 2010.