

# Jay Henderson

University of Waterloo  
Cheriton School of Computer Science  
200 University Ave West  
Waterloo, ON N2L 3G1

Email: [jay.henderson@uwaterloo.ca](mailto:jay.henderson@uwaterloo.ca)  
Homepage: [jayhenderson.ca](http://jayhenderson.ca)  
LinkedIn: [linkedin.com/in/jay-henderson/](https://linkedin.com/in/jay-henderson/)

## Education

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**PhD in Computer Science (Human-Computer Interaction)**, 2016 - Present.

University of Waterloo, Waterloo, ON.

**Honours:**

David R. Cheriton Graduate Scholarship, 2017 - 2018.

*Awarded by the director of the Cheriton School of Computer Science and an appointed committee based on academic excellence.*

**BSc Hons. in Computer Science**, 2012 - 2016.

Mount Allison University, Sackville, NB.

Honours degree in Computer Science with minors in Mathematics and Psychology.

## Publications

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1. **Jay Henderson**, Jessy Ceha, and Edward Lank. 2020. STAT: Subtle Typing Around the Thigh for Head-Mounted Displays. *Conditionally Accepted to MobileHCI '20*.
2. **Jay Henderson**, Sylvain Malacria, Mathieu Nancel, and Edward Lank. 2020. Investigating The Necessity Of Delay In Marking Menu Invocation. In Proceedings of CHI Conference on Human Factors in Computing Systems (CHI '20), Apr 25–30, 2020, Honolulu, HI USA. Association for Computing Machinery, New York, NY, USA, 1–13. DOI:10.1145/3313831.3376296
3. **Jay Henderson**, Sachi Mizobuchi, Wei Li, and Edward Lank. 2019. Exploring Cross-Modal Training via Touch to Learn a Mid-Air Marking Menu Gesture Set. In

- Proceedings of the 21st International Conference on Human-Computer Interaction with Mobile Devices and Services (MobileHCI '19). Association for Computing Machinery, New York, NY, USA, Article 8, 1–9. DOI: 10.1145/3338286.3340119
4. **Jay Henderson**, Jeff Avery, Laurent Grisoni, and Edward Lank. 2019. Leveraging Distal Vibrotactile Feedback for Target Acquisition. In Proceedings of CHI Conference on Human Factors in Computing Systems (CHI '19), May 4–9, 2019, Glasgow, Scotland UK. ACM, New York, NY, USA 11 Pages. DOI: 10.1145/3290605.3300715
  5. **Jay Henderson**, Shaishav Siddhuria, Keiko Katsuragawa, and Edward Lank. 2017. Fostering large display engagement through playful interactions. In Proceedings of the 6th ACM International Symposium on Pervasive Displays (PerDis '17). Association for Computing Machinery, New York, NY, USA, Article 20, 1–8. DOI: 10.1145/3078810.3078818
  6. Mohamed Khamis, **Jay Henderson**, and Guiying Du. 2017. Title: PerDis 2017. IEEE Pervasive Computing 16, no. 4: 86–89. DOI: 10.1109/MPRV.2017.3971126
  7. **J. Henderson**. 2016. Evaluations of the Connect Course Registration System Across Mobile and Desktop Interfaces. (Bachelor's Thesis).

## Research and Work Experience

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### **Research Internship**, Winter 2019.

Chatham Labs, Toronto, ON.

Supervised by Dr. Ben Lafreniere.

### **Research Assistant**, 2016 - Present.

Cheriton School of Computer Science, University of Waterloo, Waterloo, ON.

Human-Computer Interaction Lab.

Supervised by Professor Edward Lank.

Focus on gesture-based interaction systems.

### **Research Internship**, Fall 2018.

Huawei Technologies Canada, Markham, ON.

Noah's Ark Lab, Human-Computer Interaction team.  
Supervised by Dr. Sachi Mizobuchi and Dr. Wei Li.

Focus on cross-modal gesture learning (Published at MobileHCI 2019).

**Research Internship**, Summer 2017.

University of Lille Sci. & Tech, CNRS, INRIA, Lille, France.

MINT Lab.

Supervised by Professor Laurent Grisoni and Professor Edward Lank.

Focus on interactions using distal vibrotactile feedback (Published at CHI 2019).

**Software Developer**, Summer 2016.

MYSA Smart Thermostat Systems, St. John's, NL.

Primary responsibilities included developing the web user interface for a smart home thermostat. Other responsibilities included embedded system development, database implementation and connecting the front end (UI) to the back end.

**Teaching Assistant / Instructional Apprentice**, 2015 - Present.

University of Waterloo, Waterloo, ON. & Mount Allison University, Sackville, NB,

Responsibilities include conducting tutorials, instructing labs, marking, preparing course materials and holding office hours to consult with students.

**Undergraduate Researcher**, 2015 - 2016.

Mount Allison University, Sackville, NB.

Honours Research in Human-Computer Interaction.

Supervised by Professor Andrew Hamilton-Wright.

Focus on evaluating the user experience using a course registration system.

## Skills

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**Technical:**

Java, Android, C# (Unity, VR development), Python (including Pandas, OpenCV), Leap Motion, IMU Sensing, Web Development (JavaScript, HTML, CSS) and R.

**Semi-technical:**

Experimental Design, User Studies, SPSS, UI/UX Design, Microsoft Office, Videography and Social Media.

## Volunteering

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**Peer Reviewer**, 2019 - Present.

Reviewer for ACM SIGCHI conferences (e.g. CHI, MobileHCI) and various international HCI journals.

**CHI Conference Allyship Program**, 2019.

Selected for past experiences in equity-related activities, these volunteers receive training in basic bystander intervention, harassment, and discrimination management, as well as relevant policies and CHI Equity procedures. Allies serve as a point of contact for any questions from attendees about equity manners.

**CHI Conference Student Volunteer**, 2017.

Student volunteer (SV) at the 2017 CHI Conference on Human Factors in Computing Systems (CHI 2017) in Denver, Colorado.

**S.M.I.L.E. Buddy**, 2014 - 2016.

The Sensory Motor Instructional Leadership Experience program consists of recreational activities on Saturday mornings paired with a child who has special needs. The goal is to provide one-on-one support in order to facilitate skill development.

**Global Brigades Student Volunteer**, 2014 - 2015.

Global Brigades is an international non-profit that uniquely implements a holistic model to meet a community's health and economic goals. The program included traveling to rural Honduras to engage in manual labor with local community members, in a mutual learning experience, to foster future sustainability.

**Youth Computer Science Workshop Instructor**, 2014.

Instructed fun introductory programming tasks to elementary school-aged children using MIT's Scratch development environment.