

Johann Wentzel

HCI Researcher, Mobile/Web Developer, VR/AR Enthusiast

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Education

University of Waterloo

Master of Mathematics – Computer Science

Sept 2018 - Dec 2019 (Expected)

Waterloo, ON

University of Calgary

Bachelor of Science – Computer Science (First Class Honors)
Bachelor of Commerce – Business Technology Management

Sept 2011 – Jun 2017

Calgary, AB

GPA: 3.85 / 4.0

Work Experience

University of Waterloo

Graduate Researcher and Teaching Assistant

Sept 2018 - Present

Waterloo, ON

- Conducting research into virtual reality UI accessibility, supervised by Dr. Daniel Vogel.
- Current research explores the effects of movement amplification on comfort and fatigue in small virtual reality spaces.
- Instructional apprentice and teaching assistant for CS 105/106 – Intro to Computer Programming.

Deloitte

Business Technology Analyst (Front-End Developer)

Aug 2017 – Aug 2018

Calgary, AB

- Created an iOS app for navigation and SAP Cloud interaction, including OCR reading and a custom keyboard.
- Created an augmented reality eCommerce demo for industry clients using Unity and Node.js.
- Created a loan application web-app for a client using Angular 4 and Salesforce.

Critical Mass

User Experience Design Intern

May 2016 – Aug 2016

Calgary, AB

- Created interactive design prototypes for user testing, using code-based animation tools (*Framer.js*, *Principle*).
- Created and annotated user flows and wireframes for websites and software. (*Sketch*, *OmniGraffle*).
- Researched, prototyped, and internally implemented an online music game (*Bootstrap/NodeJS*).

University of Calgary

Undergraduate Researcher

Sept 2014 – Sept 2015

Calgary, AB

- Developed an augmented reality interface between Google Glass, Kinect, and a Baxter humanoid robot.
- Published pilot study findings in a scientific journal as first author, winning a Calgary Undergraduate Research Award.

SMART Technologies

User Experience Design Intern

May 2014 – Aug 2014

Calgary, AB

- Created automated data entry scripts to track and close user feature requests, reducing manual entry time by 50%.
- Created various full-process mockups for products, from concepts and sketches to full interactive interface prototypes.
- Created demonstration and concept videos of early-development software prototypes.

Publications

Johann Wentzel, Daniel J. Rea, James E. Youn, and Ehud Sharlin. 2015. Shared Presence and Collaboration Using a Co-Located Humanoid Robot. In Proceedings of the 3rd International Conference on Human-Agent Interaction (HAI '15). ACM, New York, NY, USA, 273-276. DOI: <https://doi.org/10.1145/2814940.2814995>

Invited Talks

Robotics in Manufacturing / Working Alongside Baxter. ACAMP Seminar Series - Unmanned Vehicles, Robotics, and Intelligent Systems Seminar. Calgary, AB, Canada.

Shared Presence and Collaboration with a Co-Located Humanoid Robot. University of Calgary Undergraduate Research Symposium. Calgary, AB, Canada.

Awards

- 2018 **David R. Cheriton Graduate Scholarship**, \$10,000/year for two years (institutional, academic)
Domestic Masters Entrance Award, \$5,000 (institutional, academic)
Declined: NSERC Graduate Scholarship (CGS-M), \$17,500 (Saskatoon/Calgary, national, academic)
- 2016 University of Calgary Undergraduate Merit Award, \$800 (institutional, academic)
- 2015 P.U.R.E. (Program for Undergraduate Research Experience) Award, \$6,000 (institutional, academic)
- 2014 Alistair H. Ross Memorial Scholarship, \$3,750 (institutional, academic)
- 2011 President's Admission Scholarship, \$2,500 (institutional, academic)
- 2011-2017 Dean's List (GPA above 3.6 / 4.0 for the entire year)

Selected Projects

MagnaGirl (Extra Credits Game Jam)

August 2018

- A side-scrolling platforming game using magnetic attraction and repulsion as a core movement mechanic.
- Contributed to the game's level design, including programming magnet physics and player movement.

How Long Until Super Smash Bros. Ultimate?

Released June 2018

- A single-purpose Heroku site that counted down to the release date of the video game *Super Smash Bros. Ultimate*.
- Traffic of up to 45,000 users per week, featured on various video game forums (via Google Analytics).

Coril150 (iOS/Android App)

Released June 2017

- As a solo freelance developer, created a news reader app for Coril Holdings Ltd.'s Canada 150 celebrations.
- Duties included UI design, UI development, and development of the app's behavior and network calls.

Proxemic Dashboard (HCI Class Project)

April 2015

- A depth-aware bulletin board where the information shown changes based on how close the user is standing.
- Designed and developed the entire project, from initial sketches to working prototype.
- Depth sensing implemented with the Kinect SDK, UI elements from Visual Studio's Windows app designer.

Volunteering

University of Calgary Orientation

Sep 2013 – Sep 2015

- Led groups of around thirty first-year students on tours of campus.
- Facilitated several campus-wide volunteering events to build awareness of campus services.
- Provide one-on-one directions and advice for students seeking answers about campus life.

University of Calgary Music Theatre

June 2013 – Jan 2015

- Cast member and social media manager for the University of Calgary Operetta Company.

Alberta Youth Choir

Oct 2013 – Oct 2015

- Performed as a vocal bass along with around 40 others in a provincial honor choir, offering touring performances in various different venues around Alberta.

Front Row Centre Players

June 2011 – June 2018

- Cast member, orchestra performer, and technical setup advisor for various musical theatre productions.

Skills

Programming languages: Swift, Objective-C, Java, HTML, CSS, Javascript, XML, C/C++/C#, Python, SQL.

Frameworks/tools: Xcode, Android Studio, Bootstrap, React, Angular 4, d3.js, jQuery, Wordpress, NodeJS, Git.

Tools: Sketch, Framer.js, Principle, Balsamiq Mockups, Adobe Creative Cloud.

Misc./Hobbies: Computer building, custom Android ROMs, VR game development (Unity), VR/AR interfaces (Leap Motion, etc.)