

Derrek Chow

derrekchow.com
hi@derrekchow.com
[linkedin.com/in/derrekchow](https://www.linkedin.com/in/derrekchow)

Research Interests

Creativity with computers, {tangible, ludic, spatial, novel} interaction and interfaces

Research Experience

Human-Computer Interaction Lab, University of Waterloo, Cheriton School of Computer Science

Research Assistant (Full-time), May – Aug 2021

Designing and evaluating interactions for future laptop form factors with [Daniel Vogel](#) and [Quentin Roy](#)

Undergraduate Research Assistant (Part-time), Sept 2020 – April 2021

Designed and prototyped non-anthropomorphic forms of virtual assistants focused on high controllability

NTU HCI Lab, National Taiwan University, Department of Computer Science

Undergraduate Visiting Researcher, Jan – March 2021

Demonstrated new VR applications of ungrounded force feedback using air jet technology with [Mike Chen](#),
and created a large-scale user-surrounding tangible interface with [Lung-Pan Cheng](#)

Skills

Programming Languages	Python, JavaScript, Java, C++, C#, Ruby, Clojure, PHP
Web Development	React, Rails, Node, Backbone.js, Flask, jQuery, SQL, Cypher, HTML/CSS
Design + Visualization	Graphic + branding + UI/UX design, Figma, Processing, Pts.js, openFrameworks, Adobe Suite
Research	Electronic + physical fabrication, interviewing, ideation, concept development

Internships

Software Engineering Intern, [StackAdapt](#), Sept – Dec 2019

Collaborated with designers to develop and ship a payment management interface and billing system

Software Developer Intern, [Desire2Learn](#), Jan – Apr 2019

Ideated and developed several R&D web-based prototypes at [D2L Labs](#) to explore the future of learning

Software Developer Intern, [Tulip Retail](#), May – Aug 2019

Architected and implemented a feature for customers to manage their communication permissions

Education

University of Waterloo, B.SE. Software Engineering, 2017 – 2022

[Graduate Level Course] *Advanced Topics in Human-Computer Interaction: Experimental Methods in HCI*
taught by [Edward Lank](#)

Projects

<u>Computational Art</u>	Visual and audio explorations in art and computers
<u>Point2Speech</u>	Novel input device that speaks out loud text on a page when pointed to
<u>Automatic Cannon</u>	Self-aiming cannon that fires at moving targets
<u>Hack the Fridge</u>	Smart fridge that suggests recipes and tracks expired food
<u>Pinch Perfect</u>	Digital theremin (musical instrument) controlled by hand gestures
<u>Hungr.ai</u>	AI powered game of Hungry Hungry hippos
<u>UW Flow</u>	Course review platform with 10 mil. total page views and 30k+ monthly users
<u>From the Intercom</u>	A music + film blog and magazine for Asian-American artists

References

Daniel Vogel, Associate Professor

University of Waterloo, Cheriton School of Computer Science

Quentin Roy, Postdoctoral Fellow

University of Waterloo, Cheriton School of Computer Science

Mike Chen, Professor

National Taiwan University, Department of Computer Science