# Colin Vandenhof

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## EDUCATION

**University of Waterloo** *January 2018 - present*
Master of Mathematics (Computer Science) GPA: 4.00 / 4.00

- Alexander Graham Bell Canada Graduate Scholarship. ($17500, 2019-2020)
- President's Graduate Scholarship ($5000, 2019-2020)
- David R. Cheriton Graduate Scholarship ($10000, 2018-2019)
- Mathematics Domestic Graduate Student Award ($3000, 2018-2019)

**Dalhousie University** *September 2016 - April 2017*
Special Undergraduate of Science (Computer Science) GPA: 4.00 / 4.00

- MacKenzie Scholarship ($2000, declined)

**McMaster University** *September 2012 - April 2016*
Bachelor of Health Sciences (Honours) GPA: 3.94 / 4.00

- Provost's Honour Roll Medal (2016)
- President's Award ($2500, 2012)

## PUBLICATIONS

**A Hybrid Approach to Identifying Unknown Unknowns of Predictive Models.** Vandenhof, C. In Proceedings of the 7th AAAI Conference on Human Computation and Crowdsourcing.

**Contradict the Machine: a Hybrid Approach to Identifying Unknown Unknowns.** Vandenhof, C. & Law, E. In Proceedings of the 18th International Conference on Autonomous Agents and Multiagent Systems.

## WORK EXPERIENCE

**University of Waterloo**, Waterloo, Ontario *January 2018 - present*
*Teaching Assistant*

- Fall 2019, Winter 2019, Spring 2018 - CS 486/686: Introduction to Artificial Intelligence
- Winter 2019 - CS 480/680: Introduction to Machine Learning
- Winter 2018 - CS 136: Elementary Algorithm Design and Data Abstraction

Responsible for holding office hours, answering questions on course forums, proctoring, and marking.

**Element AI**, Toronto, Ontario *May 2019 - August 2019*
*Applied Research Intern*
Conducted research into uncertainty quantification, and the use of utility models for decision-making in production deep learning systems. Model development and experimentation in Python using PyTorch. Creation of interactive data visualization tools in JavaScript using D3.js.

**Blockcrushr Labs**, Halifax, Nova Scotia *September 2017 - December 2017*
*Software Developer*
Development of universal web application for charitable giving backed by the Ethereum blockchain. Front-end web development in React. Implemented user authentication using JWT. Integration with Node.js back-end.

**Atlantic Lottery Corporation**, Halifax, Nova Scotia *June 2017 - August 2017*
*Summer Student - Software Development*
Development of Amazon Alexa application with Node.js and deployment with AWS. Development of web scraper in Javascript and deployment of lottery results RESTful API with AWS. Integration of API with Ruby on Rails web application. Front-end web development in React.

**Dalhousie University**, Halifax, Nova Scotia *May 2017 - August 2017*
*Teaching Assistant*

- Spring 2017 - CSCI 3120: Operating Systems

Responsible for editing assignments, leading in-class activities, proctoring, and marking.

## TECHNICAL SKILLS

**Programming Languages**
Proficient: Python, JavaScript, Bash
Previous experience: C/C++, Java, R, MATLAB

**Software and Frameworks**
Version control: Git, SVN
Web technologies: React, HTML/CSS, Flask, Node.js, PostgreSQL

colinvdh.com ⋄ github.com/ColinVDH