

# Ethan Pronev

🌐 ethanpronev.com • 🐙 github.com/ethan-pronev • 🔗 linkedin.com/in/ethan-pronev/  
✉ ethan.pronev@uwaterloo.ca • ☎ 647.548.9902

## Skills

- **Programming Languages:** C/C++, JavaScript, Python, HTML, CSS, Lisp/Scheme, LaTeX
- **Tools & Technologies:** Git, Node.js, Windows, Linux, Microsoft Office

## Projects

### SKII – Augmented Reality Skiing Maps 2020

- Co-created an augmented reality heads-up display application for alpine skiing
- Built with an **ARKit** client supported by a **Node.js** backend
- Wrote **Python** scripts to parse **20,000+ geographical data points**
- Designed **pathfinding algorithms** in **C++**: modified shortest path and depth-first traversal

### SplitStub 2020-Present

- Budgeting program built in **Python** and **Node.js** in which users can scan receipts and divide costs among multiple people
- Employed **Tesseract deep-learning** to read and mesh characters into selectable fields

### Extended Essay – Graph Colouring 2018-2020

- Performed extensive research and wrote a **4000-word paper** on the efficiency of several graph colouring algorithms for solving various scheduling/optimization problems

## Experience

### President – Erindale SS Computer Science Club 2019-2020

- Gave weekly lectures to **30+ students** about various competitive programming topics: **dynamic programming, graph theory, data structures**
- Assigned practice problems to students and wrote reference solutions in **C++**

### Organizer and Judge – HackTheBlob 2019-2020

- Co-hosted an online hackathon where **70+ participants** were tasked with using data to improve student life at Erindale Secondary School
- Reached out to potential sponsors and accumulated **\$2000+** in prizes
- Evaluated submissions and awarded prizes

### Ski Instructor – Hockley Valley Resort 2020

- Created eight-week lesson plans and instructed kids and adults of various ability levels
- Commended for demonstrating attention to detail and effective communication

## Education

### University of Waterloo 2020-Present

#### Computer Science Co-op

- 98.7% faculty average

### Erindale Secondary School 2016-2020

#### International Baccalaureate

- 98.5% grade 12 top six average

## Awards & Achievements

### Faculty of Mathematics Entrance 2020

#### Scholarship (25% of tuition)

#### University of Waterloo

### Group 3 (Top 80 in Canada) 2020

#### Canadian Computing Competition

### First Place in Peel Region 2019

#### ECOO-CS Programming Competition

## Interests

Piano (13 years, RCM Level 10) • Skiing (14 years, CSIA certified) • Mountain Biking • Speed-solving Rubik's Cubes