

# Isaac Wismer

Computer Science Student • Full-Stack Software Developer

✉ isaac@iwismer.ca | 📞 +1 519-803-4565 | 🌐 iwismer | 🔄 iwismer | 🔗 https://www.iwismer.ca

## 📌 Skills

### Languages:

Python C Java  
Rust C++ Bash  
SQL

### Server/DevOps:

Docker Nginx  
Tomcat SQL DBs  
GitLab CI

### Web:

HTML CSS  
JavaScript  
Node.JS REST

### OSs:

Ubuntu CentOS  
Arch Linux  
Windows

### GIS:

ArcGIS QGIS  
GRASS PostGIS  
Geoserver  
OpenLayers

## 🎓 Education

### University of Guelph

Computer Science, Honours Co-op (B.Comp.), Minor in GIS & Environmental Analysis

90.5% overall average, 94% in Computer Science Courses

Guelph, ON 📍

Expected May 2021 📅

## 🧰 Work Experience

### GIS & Software Intern

Minerva Intelligence

Vancouver, BC 📍

May 2019 - Aug 2019 📅

- **Sea to Sky Geohazards:** Near real-time landslide hazard system
  - \* Designed and implemented landslide runout modelling system
  - \* Directly integrate runouts into a web app through using docker containers and databases
  - \* Developed runout parameters through research and testing against real world examples
- **DRIVER:** 3D Material Volume Interpolator
  - \* Designed the application to be scalable and cloud deployable
  - \* Refactored a monolithic codebase into libraries and interfaces allowing for less coupling
  - \* Used test-driven development and wrote comprehensive unit tests to ensure code reliability
- **Minerva Tools:** Developed a suite of GIS tools as a QGIS plugin to expedite GIS workflows
  - \* Designed and implemented an extensible codebase to allow easily adding tools by decoupling the tool from the interface

### Programming & GIS Student

Geological Survey of Canada - Northern Canada Division

Ottawa, ON 📍

May 2018 - April 2019 📅

- **Canada-3D Web Map:** Web map and query-able database that contains all bedrock geological knowledge of the North
  - \* Developed a high performance web service with accompanying geospatial database
  - \* Deployed and maintained robust and secure testing and production servers
  - \* Wrote extensive documentation for all aspects of projects

### Head Timer

Speed River Timing

Guelph, ON 📍

2009 - Present 📅

- Set up and managed small-medium sized LANs of timing devices
- Timed Olympic qualifier, national and international championship events in running, track and field & cross-country, with up to 4000 participants
- Efficiently worked with race directors and other organizers to solve race day problems

## Projects

---

### **Rusty Timer:**

Concurrent applications to interface with Ipico timing hardware over a network written in Rust.

### **Personal Web Server:**

Provision and maintain a fully containerized multi-service server, including writing a Actix (Rust) server.

### **GEDCOM Parser:**

Parser for GEDCOM Files written in C, web front-end written in Node.JS with MySQL DB.

### **Nutrient Calculator:**

Desktop/Android Java based recipe nutrient calculator using the Canadian Nutrient Database.

### **Contributions to Whitebox GAT:**

Overhauled build system to use a Python script and remove IDE dependencies.


## Volunteer Experience

---

### **Scout Leader, Rover Scout**

*31st Guelph Scouts, 32nd Ottawa Scouts (Scouts Canada)*


Guelph/Ottawa, ON 


Sept 2003 - Present 

- Led camps and weekly meetings of 11 – 17 year old youth for three years
- Organized and enthusiastically led camps, events and campfires
- Chair of the Venturer Scout Company for three years, Patrol leader for four years

### **President/Executive**

*University of Guelph Outdoors Club*


Guelph, ON 


Jan 2016 - Present 

- Planned and executed day and overnight trips for members during the semester
- Taught outdoors skills to members using small group activities
- Nurtured and shared enthusiasm for the outdoors

### **Presenter, Volunteer**

*SpartaHacks Hackathon*


Guelph, ON 


2016, 2017 

- Created and presented an interesting and educational talk for participants and volunteers
- Assisted participants with ideas, programming help and solving problems

### **Team Captain, Lead Strategist**

*Centennial CVI FIRST Robotics Competition Team 5631*

Guelph, ON 

2015 - 2016 

- Led in the designing and building of a competition robot
- Problem solved and troubleshoot mechanical and software issues
- Promoted and marketed team to sponsors

## Awards & Achievements

---

<b>AdKnown Scholarship</b>	For demonstrated leadership, innovation and volunteerism	2019
<b>CUREC Scholarship</b>	Selected national recipient	2019
<b>Co-op Student of the year</b>	[Nominee] For exceptional performance during co-op with the GSC	2018
<b>U of G CEPS Dean's List</b>	For achieving an outstanding semester average (>80%)	All Semesters
<b>UGRA Scholarship</b>	For having the highest cumulative average of all applicants	2018
<b>Adirondack 46er</b>	For summiting all 46 mountains over 4000ft in New York State	2018
<b>CCVI Spartan Award</b>	For outstanding academic performance & community involvement	2016
<b>Branden J Eccles Award</b>	For achievement in IT courses & community involvement	2016
<b>Chief Scout's Award</b>	Scouts Canada's highest achievement award	2013