

# Isaac Wismere

Software Developer • Adventurer • Ice Cream Enthusiast

## Experience

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### Senior Software Engineer

Block Inc. — CashApp

Remote 

Nov 2021 - Present 

- **Payment State Machine Service:**
  - \* Added features on a payments service handling over **\$2B USD/day of transactions**
  - \* Completed ongoing maintenance of the service, including achieving **99.999% uptime**
  - \* **Documented and shared** service knowledge and internals with other engineers
  - \* Planned, prioritized and estimate road maps of new features and maintenance work
  - \* Overhauled observability and tune alerts to decrease oncall load, prevent and mitigate SEVs
- **Onboarded and mentored** new engineers, assigning progressively more complex tasks as they got up to speed
- Part of an **oncall rotation**, addressing ongoing incidents and issues, answering engineering questions
- Implemented a greenfield microservice from design to maturity and maintenance
- Spearheaded **GraphQL** transition to simplify customer service integrations

### Software Developer Co-op

CAScination

Bern, Switzerland & Remote 

January 2020 - May 2021 

- **OTOPLAN:** Cochlear Implantation Planning Software
  - \* Added robust functionality in **C++** and **Qt** including **unit and integration tests**
  - \* Worked efficiently with a small team in an **agile environment** in person and **remotely**
  - \* Wrote high quality code for production medical software and performed **code reviews**
  - \* Actively participated in an ISO 62304 software release
- **Continuous Integration Pipeline:** Rewrote the Jenkins pipeline
  - \* Redesigned and implemented Jenkins CI pipeline to enable increased scalability and **reduced build times** by 50%
  - \* Simplified the application release pipeline, greatly automating it and **reducing developer time** required for release

### GIS & Software Co-op

Minerva Intelligence

Vancouver, BC 

May 2019 - Aug 2019 

- **Sea to Sky Geohazards:** Near real-time landslide hazard system
  - \* Directly integrated runout modelling into a web app using **Docker** containers and a **PostGIS** SQL database
  - \* Completed extensive research and testing to determine model parameters
- **DRIVER:** 3D Material Volume Interpolator
  - \* Designed and implemented a scalable and **cloud deployable** Python application
  - \* Refactored a monolithic codebase into libraries and interfaces for increased modularity
  - \* Used **test-driven development** and wrote comprehensive **unit tests** to ensure code reliability

### Programming & GIS Co-op

Geological Survey of Canada

Ottawa, ON & Remote 

May 2018 - April 2019 

- **Canada-3D Web Map:** Web map and searchable database containing all Arctic bedrock geological knowledge
  - \* Developed a high performance **Node.JS** web service with accompanying **PostGIS** geospatial database
  - \* Communicated with stakeholders to determine requirements and issues
  - \* Deployed and maintained secure **Linux** testing and production servers

## Education

### Bachelor of Computer Science

Honours, Co-Op, Distinction (90% average), 2021 Society of Excellence Inductee

University of Guelph 

Sept 2016 - Apr 2021 

## Volunteering & Achievements

### Scout Leader: 2016 - Present

Lead weekly meetings and monthly camps for youth 11-17, taught outdoors skills while leading weekend + week long trips

### U of Guelph Outdoors Club President: 2018 - 2020

Planned and executed day and overnight trips for members during the semester, ran the day-to-day business of the club

### Bruce Trail Thru-Hike: June 2021

Hiked the 930km trail in 31 days, averaging 30km/day

### Adirondack 46er: Summer 2018

Climbed all 46 4000' mountains in the Adirondacks in 5 weekends

## Skills

### Languages:

Kotlin  Java  Rust  C++   
Python  C  JavaScript 

### Tools/DevOps:

Docker  Git  Linux   
GitLab CI  Buildkite   
Jenkins  Gradle 

### Databases:

DynamoDb  Postgres   
MySQL  MongoDB   
PostGIS 

### Server:

Nginx  Shell  SQS   
GraphQL  gRPC   
Microservices  Kafka 