

# Mason Hill

Edmonton, AB | [LinkedIn](#) | 1-780-262-4009 | [Mason.m.hill1@gmail.com](mailto:Mason.m.hill1@gmail.com) | [hillm88.github.io](https://hillm88.github.io)

---

## Work Experience (1 Year total in Software Development)

### Betable (Startup), Edmonton AB

*Junior Software Engineer, 8 months (Current Job)*

- Used Golang to develop and improve various aspects of the Betable software architecture including developing RESTful API endpoints for a new product, resulting in a 30% increase in software accessibility.
- Used Ginkgo and Gomega to streamline testing resulting in a 40% decrease in testing time.
- Developed and implemented Agile methodologies throughout the software development lifecycle such as daily standup and sprints, resulting in a 20% increase in sprint completion rates.
- Implemented Open API/Swagger on REST API calls, enabling easy contract testing and improving the quality of REST APIs.
- Collaborated with team members to review, provide feedback, and merge over 60 pull requests using Github, resulting in a more streamlined development process.
- Used Cassandra to enable storage testing, resulting in a 50% increase in testing coverage.

### The King's University, Edmonton AB

*Junior Software Engineer, 4 months (Summer Practicum)*

- Developed a REST API testing algorithm in Java and Bash, resulting in a 99% reduction in test cases and at 75% improvement in REST API testing speed.
- Designed and tested Java and Bash based REST APIs, improving robust algorithms to reach a 100% HTTP case coverage and ensuring accuracy with a 100% reliability rate.
- Leveraged automation tools to reduce test coverage gaps, shortening the time for manual testing cycles by 80%.
- Configured & deployed two Docker containers, running separate REST API services, enabling end-users to capture & store API logs via an Nginx platform and ensuring more efficient setup and reliability across platforms.
- Optimized performance of log generation system by 80%, leading to a 60% decrease in run time and a 70% increase in log generation efficiency.

## Skills

### Languages

JavaScript/TypeScript, C++, Java, Bash, Python, PHP, Go (Golang), SQL, Cassandra

### Tools/Other

Nagios, Elasticsearch, Docker, MySQL, Linux, Office Suite (Excel, Word and Powerpoint), Google Cloud Platform, Bugzilla, JUnit, SpotBugs, XML, Git, Unity, Maven, JaCoCo, ReactJS

### Soft Skills

Interpersonal Management, Problem Solving, Coordination, Professionalism, Collaboration, Cooperation

## Software Projects

### Wordle Recreated In Go

<https://github.com/hillm88/GoWordle>

A program written in Go that will allow you to play a game of wordle on the command line while also having a full test suite.

### Sudoku Backtracking Solver

<https://github.com/hillm88/Sudoku-Backtracking-Solver>

A program written in java that will solve any sudoku problem using backtracking search and constraint propagation

More projects are available at <https://github.com/hillm88>

## EDUCATION

### The King's University

Bachelor of Science in Computer Science

- Men's Soccer, King's Science Society, Kings Indigenous Students Society

Edmonton, AB

Graduation Date: Dec 2022

## Leadership Experience

### The King's University Men's Soccer Team

*Co-Captain*

The King's University Men's Soccer Team abbreviated to TKU MSOC. A member of TKU MSOC for 4 years. Through TKU MSOC, we compete in the ACAC conference, and play games and tournaments over various parts of Alberta. We are responsible for representing our school and giving our best as people and players.