

# Mitchell Ma

206.384.1151 | [mitchellma0427@gmail.com](mailto:mitchellma0427@gmail.com) | [mitchma.bitbucket.io](http://mitchma.bitbucket.io)

---

## WORK EXPERIENCE

### SOFTWARE DEVELOPMENT ENGINEER | AMAZON PRIME VIDEO

April 2020 - Present

### SOFTWARE ENGINEER | ARISTA NETWORKS

September 2018 - March 2020

- Member of a network switch platforms team that works on Arista's Extensible Operating System (EOS)
- Responsible for enabling and testing one of EOS's agents on some of the newer switch chips
- Implement requested features such as new CLI commands on EOS and introduce complementary tests
- Active participant in code reviews and code maintenance through bug fixes and code refactoring

## TECHNICAL SKILLS

Familiar with:

Python 3 • C# • Java • JavaScript • TypeScript • HTML & CSS (SCSS) • GDScript • C/C++ • SQL • Assembly •  $\text{\LaTeX}$

I've used these before:

Linux • Vim • Git • Flask • Node.js • AJAX • JQuery • React Native • Elastic Stack • Unity • Godot • Illustrator • Photoshop • SublimeText • PostgreSQL • OracleDB • GDB • PDB

## PROJECTS

### BOTKUN | STATS OPTIMIZER FOR AN MMORPG

December 2018 - January 2019 | Solo | Python 3 • PostgreSQL

- Wrote scripts to automatically decompile and parse relevant game data upon every game update
- Implemented API to quantify character's current stats and suggest optimal ways to advance the character further
- Provided option to either persist user data on local storage or perform SQL queries to database
- Created Discord bot that allows users to intuitively interact with API through bot commands
- Built and deployed to Heroku with some feature updates requested by a few players from among 400 users

### ONCE UPON A TIME | DUNGEON CRAWLER AND FARMING SIMULATION RPG

January 2018 - Present | Solo | GDScript • C# • C++ • Blender

- Responsible for writing up networking code to synchronize players, inventories, map objects, etc.
- Implemented core mechanics such as environmental interactions, procedural dungeon generation, and AI movement
- Prototyped various common game features such as save, chat, inventory, and crafting system
- Created, drew, and animated art assets using Blender and Adobe Illustrator and further polished in Godot using shaders

### POST ME | A PRETTIER CRAIGSLIST

December 2017 - March 2018 | 2 Members | JavaScript • React Native • Java • SQL

- Implemented user registration and authentication through Google, Facebook, or email using Firebase
- Wrote RESTful server that stores and retrieves user data, posts, and messages using PostgreSQL
- Created basic user interface including login, chat, post, and user settings pages
- Responsible for Android-side testing and verification

### NONIT | ARISTA HACKATHON - CODE REVIEW CATEGORIZER

October 2019 | 2 Members | Python 3 • Flask • Elastic Stack

- Responsible for writing REST microservice that crawls for, parses, and locally stores code review comments using Flask
- Set up Logstash to feed data to Elasticsearch or directly bulk transfer review comments to Elasticsearch's REST API
- Created visualizations using Kibana by manipulating data that were populated into Elasticsearch

## EDUCATION

### UNIVERSITY OF BRITISH COLUMBIA | BSC IN MATHEMATICS AND COMPUTER SCIENCE

September 2014 - May 2018 | Vancouver, BC