# **Aaron McCarthy**

□ amccarthy9904@gmail.com

Seattle, WA

github.com/amccarthy9904

603-303-5428

## **EXPERIENCE**

Lumen Seattle WA

Sr. Software Engineer

2021 - present

- Built Ansible inventory management system in Python
- Automated collection and distribution of real time inventory info
- Building Automated Azure Hyper Converged Infrastructure deployment pipeline

Boeing Everett WA

Software Engineer

2019 - 2021

- Created flight software virus scanning cloud microservice
- Used RabbitMQ with Java to implement Remote Procedure Call design pattern
- Shifted legacy .NET apps into Cloud with Azure DevOps CI/CD pipleines
- Reduced Gradle build time by 80% on a monolithic Java project

TechLink Bozeman MT

Software Engineer Intern

2017 - 2019

- Developed cutom automated testing framework in C with Selenium
- Wrote automated tests with MSTest for Dept. of Defence
- Used Agile to collaborate with colleagues through GitLab's Kanban

# **EDUCATION**

# **Montana State University**

**Bozeman MT** 

BS in Computer Science

2018

### **PROJECTS**

#### **IMDB Movie Data Analysis**

- Designed and created a MySQL database with imdb.com's datasets
- Created Naive Bayes and Quadratic Regression models with sklearn to make predictions

#### **Twitter Reply Bot**

- Built a Twitter bot in Python that monitors other accounts
- Asynchronously sends replies to monitored accounts when they tweet

#### **Currency Converter**

- Created Angular web app with Bootstrap hosted on AWS that converts currency
- Asynchronously fetches exchange rates in JSON from cryptocompare.com's API

## ListShare

- Built a website using Django hosted on AWS
- Created interface with HTML/CSS, managing data with SQLite

#### Pizza Ranch Adventure

- Created a side-scrolling game in Python using Pygame
- Implemented jumping mechanics, multiple music tracks, collision detection

#### **Machine Learning**

- Implemented PSO, K-means, DBscan, Genetic Algorithm, Evolution Strategy in Java
- Trained Radial Basis Function and Sigmoidal Neural Networks using Backpropagation

## **Skills**

- Languages: Java, C#, Python, JavaScript, HTML/CSS, LaTeX
- Tools: Angular, Node.js, Spring, Git, AWS, OpenStack, Ansible
- Principals: Agile, Scrum, Kanban, TDD, Design Patterns, Unit Tests, Automation, UML