Aaron McCarthy

✉ amccarthy9904@gmail.com   📍 Everett, WA   ⌂ github.com/amccarthy9904   ▯ 603-303-5428

EXPERIENCE

Boeing   **Everett WA**
Programmer Analyst II   2019 - present
- Extended functionality of airplane software delivery network
- Developed scaleable Virus Scanner microservice using RabbitMQ
- Reduced Gradle build time by 80% on a multi level Java project

TechLink   **Bozeman MT**
Software Engineer Intern   2017 - 2019
- Developed automated testing framework that wraps FlaUI and Selenium
- Wrote automated tests for software developed by the Department of Defense
- Collaborated with a software development team using GitLab's Kanban

EDUCATION

Montana State University   **Bozeman MT**
BS in Computer Science   Graduated: 2018

PROJECTS

Twitter Reply Bot   2021
- Built a Twitter bot in Python that monitors other accounts
- Asynchronously sends replies to monitored accounts when they tweet

Currency Converter   2021
- Created Angular web app with Bootstrap hosted on AWS that converts currency
- Asynchronously fetches exchange rates in JSON from cryptocompare.com's API

ListShare   2019
- Built a website using Django hosted on AWS
- Created interface with HTML/CSS, managing data with SQLite

Pizza Ranch Adventure   2018
- Created a side-scrolling game in Python using Pygame
- Implemented jumping mechanics, multiple music tracks, collision detection

Coinswap   2018
- Parsed cryptocurrency exchange rate info using shapeshift.io's API
- Designed an algorithm to find profitable exchange paths between cryptocurrencies

Machine Learning   2017
- Implemented PSO, K-means, DBscan, Genetic Algorithm, Evolution Strategy
- Trained Radial Basis Function and Sigmoidal Neural Networks using Back Prop
- Compared the performance of algorithms in formal scientific paper

IMDB Movie Data Analysis   2017
- Designed and created a database using MySQL to hold data from imdb.com
- Queried the database and analyzed data using sklearn, scipy, and plotly
- Used quadratic regression and naive bayes to correlate and classify the data

KNOWLEDGE

- Languages: Java, C#, Python, JavaScript, HTML/CSS, XML, JSON, LaTeX
- Tools: Angular, Node.js, Git, GitLab, Linux
- Principals: Agile, Scrum, Kanban, TDD, Design Patterns, Unit Tests, Automation, UML
- Databases: SQL, MSSQL, SQLite, ER Diagrams, Relational Algebra