# **Aaron McCarthy**

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♥ Everett, WA

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2017

### **EXPERIENCE**

**Everett WA Boeing Programmer Analyst** 2019 - present

- Extending 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** 2017 - 2019

Software Engineer Intern

- 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**

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

#### **PROJECTS**

**Currency Converter** 2021

- Created Angular web app with Bootstrap hosted on AWS that converts currency

- Asynchronously fetches exchange rates from exchangeratesapi.io

ListShare 2019

- Built a website using Django hosted on AWS

- Created interface with HTML/CSS, managing data with SQLite

2018 Pizza Ranch Adventure

- Created a side-scrolling game in Python using Pygame

- Implemented jumping mechanics, multiple music tracks, collision detection

**PFL Order Submitter** 2018

- Created WPF application that deserializes product information in JSON from PFL's API

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**

- 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 ML techniques to show interesting correlations in 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, Entity Relationship Diagrams, Relational Algebra