Matthew Carter

Computer Scientist

matthew@macarter.net

(360) 798 - 4721

Bellingham, WA

macarter.net

linkedin.com/in/matthew-a-carter

github.com/matcarter

EDUCATION

BS in Computer Science
Western Washington University

09/2017 – Present *GPA: 3.43*

Courses

- Deep Learning
- Analysis of Algorithms
- Operating System Internals
- Database Systems

AS-T in Computer Science
Clark College

09/2015 – 06/2017

WORK EXPERIENCE

Software Development Engineer Intern
Micro Focus

06/2019 – 09/2019 *Bellingham, WA*

Achievements/Tasks

- Designed and developed an internal web app to increase team productivity and efficiency
- Implemented the web app with the VueJS framework
- Created automatic install scripts to install different products and product versions
- Used GitLab CI/CD to install the latest product versions on virtual machines
- Used Docker for creating images and containers with different installed product versions
- Implemented Rest APIs for communication between the web app and various services

IT Systems Admin Intern
Christenson Electric

06/2016 – 09/2018 *Portland, OR*

Achievements/Tasks

- Designed forms for a web-based platform to improve technician efficiency
- Setup and deployed various work stations, iPads, and other equipment
- Managed the IT infrastructure throughout the office

SKILLS

Problem Solving | Collaboration | Communication

C | Java | Python | HTML | CSS | JavaScript

Linux | Git | CI/CD | Docker | Data Structures

PROJECTS

StarCraft: Brood War AI (09/2019 – Present)

- With a team of 4 other CS undergraduates, we're working on developing an AI/ML system that can interact with and play the video game StarCraft. The system should be able to handle build orders, troop management, and other in-game tactics. Another part of the project will be simulating human strategy, movements, and overall game play.

Mini Operating System Kernel (09/2019 – 12/2019)

- The Mini OS kernel for my Operating Systems Internals course is a quarter long project where we develop a fully functioning "mini" kernel for the Blitz system. The kernel has all necessary features such as resource management, a small file system, and user level process execution.

Adversarial Machine Learning Research (01/2018 – 03/2020)

- Research with Dr. Michael Tsikerdekis for fake content detection and the effects of adversarial attacks. The research includes the compilation of various fake content detection techniques that apply machine learning and the analysis of adversarial attacks on these techniques. The result will be a paper titled "Approaches for Fake Content Detection: Strengths and Weaknesses to Adversarial Attacks".

Stock Market Analyzer (04/2019 – 06/2019)

- An application capable of analyzing 22.4 million stock market data points, processing trading intervals, calculating ticker returns, and compiling returns for entire industries.

Deadwood Studios USA (05/2018 – 06/2018)

- Designed a Java game based on the real board game Deadwood Studios USA for my OOP course. Developed the back end system and game rules then designed a GUI that mimicked the real game board for users to play on.

macarter.net (07/2018 – Present)

- A website that was designed to be a portfolio while learning the basics of HTML and CSS using Bootstrap.