Max Guthrie

Computer science student seeking a software internship

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LEADERSHIP & INVOLVEMENT

Director of Technology

Engineering-Consulting Collaborative 06/2020 - Ongoing
University Park, State College, PA https://eccpsu.weebly.com/

Penn State professional organization dedicated to improving problem-solving, leadership, and consulting skills. E-CC offers pro bono consulting to local startups and seeks to help its members by offering resume and networking workshops.

- Made changes to HTML/CSS code for the organization's website.
- Lead a team of associates to develop a Flask web application with weekly meetings.
- Helped with hosting and writing in-house case competitions.
- Conducted several interviews for incoming members.

Member

Penn State Association for Computing Machinery 01/2021 - Ongoing
University Park, State College, PA

Explores computer science concepts through workshops and assignments. Holds events, such as technical interview preparation and a semesterly software competition. Attended DevPSU and AlgoPSU meetings, which focused on web application development and data structures/algorithms, respectively.

Crew Leader (Employment)

Penn State Food Services 06/2019 University Park, State College, PA

Penn State Dining Commons

- Cooking and preparing food for customers and working the cash register
- Shadowing new employees
- Closing down and cleaning stations at close

PERSONAL PROJECTS

Stock Market Sentiment

https://github.com/mguthrie45/Stock-Sentiment-Analyzer

Python-based software that scrapes news articles about stocks on the user's watchlist. Used a sentiment analyzer to find a stock's positive-negative score. The user is notified in the program and by email when an investment significantly changes in sentiment. Used threading to allow for real-time sentiment analysis.

- Used Libraries: BeautifulSoup4, Pandas, NTLK, threading

Python Search Engine

https://github.com/mguthrie45/Search-Engine-Simulation

A rudimentary, Python 3 search engine aided by the Flask web framework.

- Involved three main components: SQLite database for storing site content and keywords, the HTML/CSS-based GUI, and the crawler, which was responsible for finding new websites.
- Helped me understand how search engines gather info from the web, how they can find results, and important concepts surrounding SEO optimization.

Sorting Algorithm Visualizer

https://github.com/mguthrie45/Sorting-Algorithm-Visualization

Full-stack, responsive application with Object-oriented back end JS. Made with an easy-to-understand UI that presents smooth animations for famous sorting algorithms.

- Used technologies: JavaScript, HTML, CSS

Digit Drawing Classifier

https://github.com/mguthrie45/Digit-Drawing-Classifier

A GUI that allows the user the draw digits and returns a predicted digit from a sequential neural network. Trained using an MNIST digit dataset.

- Helped me learn about how handwriting can train neural networks
- Used technologies: TensorFlow 2

EDUCATION

B.S. Computer Science, Economics Minor

Pennsylvania State University GPA: 3.98
08/2019 - 05/2023 State College, PA

PROGRAMMING LANGUAGES

Python

HTML & CSS

JavaScript

Java

C

SKILLS

GIT | **Shell (UNIX and Windows)** | **Bootstrap** | **Tensorflow & SKL (Beginner)** | **SQL (Basic Experience)** | **SQLite** | **Data Structures & Algorithms** | **Verilog & Xilinx Vivado** | **MIPS ISA & CPU Design** | **VMWare** | **Systems Programming (C)** | **Flask** | **JDBC & Apache Derby** | **Microsoft Excel** | **Microeconomic Analysis (Inter)**

Strengths

Presentation and Speaking | **Optimism** | **Intellectual curiosity** | **Open mindedness**