Aaron Waller

walleraar@gmail.com | 908-255-0321 | walleraa@umich.edu
508 Lawrence Street Apt 5, Ann Arbor, MI 48104 | 19 Milburn Drive, Hillsborough, NJ 08844

OBJECTIVE:
To use my experience with full-stack development, cybersecurity, Object-Oriented Programming, and algorithms to obtain a position as a software engineering intern.

EDUCATION

UNIVERSITY OF MICHIGAN
BS IN COMPUTER SCIENCE
Ongoing | Ann Arbor, MI
College of Engineering
Cum. GPA: 3.9/4.0

COURSEWORK

Web Systems, Web Development, Cybersecurity, Machine Learning, Artificial Intelligence, Data Structures and Algorithms, Computer Organization, Foundations of Computer Science, Linear Algebra, Multivariable Calculus, Introduction to Probability, Introduction to Statistics

LANGUAGES

Python, C++, Javascript, C#, Java, SQL, HTML, CSS, Bash, C, R

SKILLS

Full stack, Front end, Back end, Distributed Systems, Cybersecurity, Machine Learning

TOOLS

Visual Studio, VSCode, XCode, Github, Bitbucket, Microsoft SQL Server Management Studio, Linux Bash Terminal, React, Flask, GNU Debugger, Ghidra, Wireshark, Docker, AWS

AWARDS

UNIVERSITY OF MICHIGAN JAMES B. ANGELL SCHOLAR
Received for achieving all "A" records for two or more consecutive terms.

UNIVERSITY OF MICHIGAN WILLIAM J. BRANSTROM FRESHMAN PRIZE
Received for ranking top 5% in the College of Engineering.

DEAN'S LIST
Fall 20, Winter 21, Fall 21, Winter 22, Fall 22

UNIVERSITY HONORS
Fall 20, Winter 21, Winter 22, Fall 22

EXPERIENCE

BNY MELLON START DEVELOPER INTERN Pittsburgh | June 2023 - August 2023
- Will work as a member of a scrum team to transfer company watchlists from LexisNexis 4.0, a database application, to LexisNexis 5.0, a web API.
- Will write shell scripts to automate file format analysis.

UKG SOFTWARE ENGINEER INTERN
May 2022 - August 2022

- Tools used: Visual Studio, Github/Bitbucket, Microsoft SQL Server Management Studio, and Postman API.
- As a member of an Agile development team, enhanced CanadaTax, a web app used by UKG employees to assist customers with their Canadian taxes. Focused on features that help account managers keep track of pending collections from customers.
- Implemented a back-end to pull data from multiple tables, and added an additional column to store employee notes related to each collection (SQL and C#). Added front-end features to sort alphabetically or by earliest date, as well as automatically highlighting past-due dates (Javascript and CSS).
- Implemented a search bar that would allow users to filter results by tax representative (HTML and CSS). Added an autofill feature and utilized local storage to save a user's search (Javascript).
- Created a feature to scan a table to check for manual entries and if found, enable an option to remove them from the database (Javascript).

GOOGLE DATA ANALYTICS PROFESSIONAL CERTIFICATE
Summer 2021

- Utilized SQL, R programming, and Excel to analyze, clean, and visualize bicycle rental data to determine possible reasons for trends.

PAST PROJECTS

SEARCH ENGINE Constructed a fully working search engine for Wikipedia pages using Python. Used a MapReduce framework to calculate tf-idf values, which were combined with pagerank scores for each query to produce an effective ordering. A back-end server was used to query tf-idf values and combine them with pagerank scores. A front-end server was used to display the GUI and any search results in order.

WAV FILE API Used tools such as Flask and SQLite3 to construct an API that is able to receive and store either a wav file or binary data (of a wav file) via a POST request and calculate and store metadata on the file. Also included GET requests to list files by duration, provide metadata on a certain file, and download a wav file to user's computer.

NETWORK SECURITY Used cybersecurity attacks such as SQL injection, CSRF, and XSS attacks in a test environment.

UKREW MINGLE Worked with other UKG interns in a mini-hackathon to create UKrew Mingle, a full-stack website that took in data submitted by users and utilized Firebase to store the results. UKrew Mingle could then match users with similar interests.