

Aiden Seo

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Relevant Links: [LinkedIn](#) | [GitHub](#)

Programming Languages: C, C++, C#, Python, Java, JavaScript/HTML/CSS, PostgreSQL, Swift, MATLAB, VHDL

Frameworks: ASP .NET Core 7.0, Bootstrap, Flask, TensorFlow

Technologies: Git, Linux, Jira, Eclipse, IntelliJ, VSCode, VMWare, STM32CUBE, CCSTUDIO, freeRTOS, Kubernetes, Docker

EDUCATION

University of Pittsburgh – Pittsburgh, PA
Bachelor of Science - Computer Engineering

Expected April 2024
Overall GPA: 3.54 / 4.0
In-major GPA: 3.65 / 4.0

EXPERIENCE

Microsoft

Jan '24 – Present

Industry Project Fellow

- Developed a pytest plugin that facilitates running tests on docker containers and Kubernetes pods as a team using a custom dockerfile, pytest-xdist, k3d, and python that will be used for Microsoft's future project
- Held weekly meetings with engineers from Microsoft and professors from the University of Pittsburgh to discuss the progress of the project which increased the productivity and validity of the implementation

Infor

May '23 – Aug. '23

Software Development Intern

- Created a database inspector tool using Java and SQL queries to provide faster access to the SQL server from the web
- Updated the existing SQL queries that were used to access the database, leading to a 24% decrease in process time
- Developed a SQL query, servlet, and UI for a feature that will be newly added to the customer interface

WEX

Sept. '22 – May '23

Software Engineer Intern

- Utilized Gherkin and Python to create automated REST API test cases for both frontend UI and backend API of various services to confirm their reliabilities and validity to prevent possible code flaws
- Worked with professional engineers to closely monitor the development cycle of a newly implemented product
- Practiced agile technique and actively participated in the daily standups to reduce technical debt

Alzheimer Disease Research Center

Feb. '23 – May '23

Research Assistant

- Used Wiener Cascade, XGBoost, and SVR decoders to measure the movement and position of eyes based on the data collected from the electrical signals of the brain under the supervision of a graduate student from CMU
- Created efficiency table by giving different numbers of nodes to the decoder to measure their performances

University of Pittsburgh Swanson School of Engineering

May '22 – Oct. '22

Research Assistant

- Utilized OpenMV, Python, and TensorFlow to create an object detector that can be deployed to low-powered micro-circuit devices with a camera as part of the research
- Tested inductive charging technique on microcircuits to ensure the reliability of wirelessly power supply

PROJECTS

32-bit Pipelined CPU | VHDL, TCL, C, Xilinx, Vivado 2018.3

- A programmed CPU that can run 21 basic MIPS assembly commands developed using VHDL in Vivado 2018.3
- Follows a real-life CPU structure consisting of ALU, Register, Memory Unit, and Control Unit with five stages of simplified pipeline structure based on internal clock bits using a mealy machine

Blog Web Application | C#, ASP .NET Core 7.0, Microsoft SQL

- A blog web application with different access levels for users and different permissions for admins and super admin
- Like a real blog system, the application allows the user to add posts, edit existing posts, search for a specific post with tags, add comments, and edit the existing user account by accessing the Microsoft SQL database

Solar System Simulation | Python, Jupyter Notebook

- A solar system simulation that shows the movement of all the planets in Earth's solar system developed using Python and jupyter notebook
- Implemented using planetary motions, complex physics equations, and actual metrics of planets to make it realistic
- Visualized the movements and changes in the solar system using the VPython library