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

**EDUCATION** 

University of Pittsburgh - Pittsburgh, PA

Master of Science - Computer Engineering

**University of Pittsburgh** – Pittsburgh, PA

Bachelor of Science - Computer Engineering

**Expected April 2026** 

**Expected April 2024** 

Overall GPA: 3.55 / 4.0 In-major GPA: 3.65 / 4.0

**EXPERIENCE** 

Microsoft Jan '24 – Present

Industry Project Fellow

- As part of Microsoft's project, developed a pytest plugin that facilitates running tests on docker containers and Kubernetes pods as a team using pytest-xdist and k3d
- Held weekly meetings with engineers from Microsoft and professors from University of Pittsburgh to discuss the progress of the project

**Infor** May '23 – Aug. '23

Software Development Intern

- Created a database inspector tool using Java and SQL gueries to provide faster access to the SQL server from the web
- Optimized the methods used to access certain sections of the database, leading to a 24% decrease in processing time
- Developed a SQL guery, 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 test cases for both frontend UI and backend API of various services
- Created test cases for the REST API and ensured validity to resolve possible code flaws
- 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 microcircuit devices with a camera
- Tested inductive charging technique on microcircuits to wirelessly supply power

## **PROJECTS**

# 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.

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

- A simplified 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