

# Kai A. Hoenshell

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## EDUCATION

### University of Cincinnati

B.S. - Computer Science, Turner Scholar, University Honors Scholar, Dean's List

Expected Graduation: May 2025

Cumulative GPA: 3.50/4.00

## EXPERIENCE

### Software Development Intern, Siemens PLM Software, Milford, Ohio

January 2024 - August 2024

- Ported Teamcenter Visualization Convert and Print Application (VVCP) from **TCL** to **C++**
- Worked with **Windows Print API** to create graphics software that prints file to Windows & Linux in **C++**
- Wrote **automated tests** to validate large scale software functionality in the **Cucumber Framework**

### Software Development Intern, Siemens PLM Software, Milford, Ohio

May 2023 - August 2023

- Developed **AWS Lambda** functions to embed JavaScript calls in an **React web framework**
- Managed client and server-side tasks through VM administration and oversaw software releases
- Developed REST API in **Docker** container in **Python Flask** using **Postman** to handle up to 500 requests

### Engineering Education 1120 Undergraduate Teacher Assistant, University of Cincinnati

January 2023 - April 2023

- Tutored students on the **fundamentals of engineering**, programming, problem solving, and algorithm design
- Created and graded weekly homeworks, quizzes, and exams given to students (**20hr/wk**)

### Software Engineering Co-op Dryer, GE Appliances, Louisville, Kentucky

May 2022 - August 2022

- Cooperated with peers to develop a the **patent** Scent Buddy - a dryer that deploys scent through cartridges
- Developed automated **Test Driven Development** testing through **NodeJS** and **Javascript** for **embedded software**
- Optimized Estar Algorithm for a dryer to have more control over heat relays using **Lua**, increasing efficiency from the former algorithm by **30%**

### Software Engineering Co-op Refrigeration, GE Appliances, Louisville, Kentucky

August 2021 - December 2021

- Implemented, designed, reviewed, and tested embedded software using Object Oriented **C/C++** and **Lua**
- Tested and debugged system software for appliances using **loadboxes** and **simulations**
- Collaborated with a large team environment based locally and in South Korea using the **Agile Scrum** framework

### Darwin T. Turner Scholarship Program, Ethnic Programs & Services, Cincinnati, OH

August 2020 - Present

- Awarded full tuition for **diversity engagement, community service, and academic success** to embody the cornerstones of Turner Program throughout the community: scholarship, service, and success
- Complete over **30 hours of community service** annually throughout the Cincinnati community and beyond

## PROJECTS

### Balanced Brief | Angular, Python, Cohere, Qdrant

November 2023, MakeUC 2023

- Created a website in the **Angular** framework that scrapes the internet for related articles using **BS4** in **Python** then parsed them into embedded vectors that become stored into the cloud database **Qdrant**
- Utilized the **Cohere** LLM to summarize the articles and identify bias in articles based off of the vectors in **Qdrant**

### Event-Driven Socket Server | Linux, C, Socket Programming

January 2023

- Devised a TCP server with **Linux** sockets API to communicate with a remote client running multiple connections
- Process delimited integer from a client, handling multiple file descriptors with **FD.SET** and **sys/select.h** to prevent head-of-line blocking from simultaneous requests.

### Greenshot | Android Studio, Google Cloud, Python, Tensorflow

October 2022, MakeUC 2022

- Developed a prototype for an Android web app using **Android Studio** that scans and identifies your trash using a neural network trained using **Google Cloud Services**
- Neural Network data parsed using **Python** into a datasheet that is used by **Tensorflow**

## SKILLS

**Languages:** Python, C, C++, SQL, JavaScript, TypeScript, HTML/CSS, Java, Lua, LabView, MatLab

**Coursework:** Data Structures and Algorithms, Discrete Structures, Linear Algebra, Computer Networking

**Technologies:** Linux, Git, AWS, Regex, ReactJS, ReactTS, .NET, Dash, Docker, Flask, Google Cloud, NodeJS