

MATTHEW OH

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PROJECTS

Operating System, March 2024

- Designed and implemented a Unix-like operating system with features such as single-user functionality, multitasking, and virtual memory in a team of four.
- Developed device handlers, PIC implementation, and system calls, collaborating closely with team members on paging systems, context switching (between user and kernel mode), and multi-terminal support.

Neural Network, February 2024

- Utilized PyTorch framework to implement neural networks, extending the linear perceptron, for accurate classification of images into five categories: ship, automobile, dog, frog, and horse.

EXPERIENCE

Refurbishing Technician Intern, Fuji America | Vernon Hills, IL | May 2024 - August 2024

- Repaired and refurbished Surface Mount Technology (SMT) heads, ensuring optimal performance and extending equipment lifespan
- Diagnosed technical issues with SMT heads, using specialized tools and software to identify and resolve problems efficiently

Fencing Instructor, Illinois Fencing Academy | Arlington Heights, IL | January 2018 - March 2022

- Adapted instructional methods and materials to meet students' abilities and interests.

EDUCATION

University of Illinois Urbana-Champaign, Anticipated Graduation May 2025

Bachelor of Science in Computer Engineering, Minor in Mathematics

GPA: 3.57/4.00

Relevant Coursework: Computer Systems Engineering, Data Structures, Artificial Intelligence, Applied Parallel Programming, Introduction to Robotics, Digital Systems Laboratory

In Progress: Control Systems, Intro to Algs & Models of Comp

Activities

Treasurer of the Korean American Student Association, March 2024 - Present

- Ran a successful thrift store donations program, contributing to a significant increase in association funds

Finance Division of the Korean American Student Association, September 2023 - March 2024

- Collaborated with team members to devise and execute successful fundraising initiatives.

Embedded Systems Team, InSPIRE, September 2023 - Present

- Working with members to develop computer vision algorithms to detect human faces using OpenCV for a drone camera.

SKILLS

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| • C, LC-3, C++, Python, System Verilog | • Fast Typing (130 WPM) |
| • Pytorch, OpenCV | • Team leadership |