Erkai Yu

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EDUCATION

University of Illinois at Urbana-Champaign, The Grainger College of Engineering

Expected June 2024

- Bachelor of Science in Computer Engineering
- Cumulative GPA: 3.93/4.0
- Relevant coursework: Operating Systems Engineering, Anomaly Detection, Database Systems, Embedded System Security, Algorithms and Data Structures.

Zhejiang University, ZJUI Institute

Expected June 2024

- Bachelor of Engineering in Electric and Computer Engineering
- Cumulative GPA: 3.96/4.0

SKILLS

Programming Languages: C/C++, Python, JavaScript, SQL, MATLAB Tools: Linux OS, MongoDB, MySQL, PyTorch, Ghidra, Wireshark

SELECTED HONORS

Third Class Scholarship of ZJUI 2020-2021 Dean's List of UIUC, 2020-2021

RESEARCH EXPERIENCE

Embedded system programming for laboratory machines.	July – Aug 2021
Unsupervised anomaly detection in computer vision.	Jan – June 2022
Embedded system library matching.	May – August 2023

PROJECTS

Automatic vaccine distribution database, a command line tool for coursework.

Feb – June 2022

- A system capable of receiving more than 10,000 registration a day.
- Implement efficient data structures to construct a database with C++.
- Command line tool, with a built-in shell for users to interact.

Unsupervised anomaly detection in computer vision.

Jan – June 2022

- A framework based on Contrastive Learning for unsupervised anomaly detection.
- Implemented with PyTorch.

A 32-bit x86 operating system built from scratch.

Oct – Dec 2022

- A basic operating system that supports multiple system calls with a terminal
- Written in C
- Multi-threading support

WORKING EXPERIENCE

The Grainger College of Engineering

Jan – May 2023

Course Assistant for ECE 391: Computer System Engineering