ETHAN
YUN

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https://moogloof.com

OBJECTIVE

Motivated student demonstrating curiosity and persistence looking for employment as a software engineering intern. Adept in a number of programming languages and can quickly pick up specific skills needed for the job. Enthusiastic to learn new tools and concepts used in the industry.

EDUCATION

Class of 2024 | Stanford Online High School

GPA 3.99/4.00

Coursework:

- Multivariable Calculus
- Linear Algebra
- Discrete Mathematics
- Lattice Point Geometry (In progress)
- AP Physics C: Mechanics & Electromagnetism
- Physics: Optics & Thermodynamics
- Modern Physics (In progress)
- Advanced Problem Solving and Proof Techniques (In progress)
- AP Computer Science
- Programming in C++: Techniques and Algorithms
- Data Structures and Algorithms
- History and Philosophy of Science
- Methodology of Science: Biology

ACTIVITIES

Software Lead | FTC Robotics Team

2022 – PRESENT

Organized members of the software team to enhance the existing codebase on the team's robot. Led the incorporation of popular object detection models, such as CenterNet, into the robot to aid in navigation. Helped new members contribute to the code by providing the necessary resources and assigning simple yet essential tasks for them to work on.

Founder/Leader | Machine Learning Club

2018 – PRESENT

Led many machine learning projects for members to partake in throughout the years. Facilitated an environment where members at any experience level with machine learning could ask questions and share achievements.

Co-Founder/CTO | Groupters, Inc.

2019 – 2021

Created a startup based on an idea with a friend. Developed both the frontend and the backend of a social media platform. Managed servers, databases, and codebases.

IoT Cluster Member | University of California COSMOS

2022

Studied IoT concepts and development under the mentorship of UC Davis professors. Learned about topics in signal processing and information theory. Developed IoT product with peers to aid in general inventory tracking.

Peer Tutor | Stanford Online High School

2019 – PRESENT

Helped students with programming languages (C++ and Java) and computer science concepts.

SKILLS

- Programming languages: Python, Java, C, C++, HTML/CSS, JavaScript
- Tools: Git, NumPy, Flask, TensorFlow, QEMU, GCC, Clang, NASM, LLVM, Django
- OS: Linux, MacOS

PROJECTS

loofOS

- x86 operating system written in C and assembly
- Custom BIOS bootloader that loads kernel to high memory
- Task switching, user processes, and virtual and kernel memory management
- https://github.com/moogloof/loofOS

Analysis of Autism Spectrum Disorder and Metrics of Eye Movement

- Paper analyzing eye movement in children for diagnosis of autism spectrum disorder
- Presented at the IEOM Monterrey 2021 conference
- http://ieomsociety.org/proceedings/2021monterrey/72.pdf

IoT Smart Shelf Liners

- Shelf liners that track the weight of items in the shelf
- Low inventory detection and notification

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- Personal blog/portfolio with Flask that is portable to any system
- https://github.com/moogloof/moogloof.com

chafsim

- Static charge visualizer written in Python, which can visualize voltage, forces due to Coulombs Law, and electric field
- https://github.com/moogloof/chafsim

REFERENCES

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