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Eric Lou

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EDUCATION

Stanford University, Stanford, CA — June 2022 / GPA 4.086
Degrees: Mathematics, BS // Computer Science, MS // Education, Minor
High Technology High School, Lincroft, NJ — June 2018 / GPA 3.95

Relevant Coursework:
Computer Science: Data Structures and Algorithms (C++), Computer Systems (C), Probability and Applications, Machine Learning *via Coursera*, Deep Learning *via Coursera*, Modern Computer Architecture (C / C++), Machine Learning (Fall 2019), Design and Analysis of Algorithms (Fall 2019)
Math: Linear Algebra, Differential Equations, Discrete Math, Matrix Theory, Fundamentals of Analysis (Fall 2019)

EXPERIENCE

Perception and machine learning intern – XMotors.ai // Mountain View, CA — July 2019 – Now
- Research and develop Python algorithms for object detection in self-driving cars
- Create method to map 2D images of objects into 3D space with 95% accuracy
- Significantly increase efficiency of neural network training by targeting bottlenecks, decreasing runtime of functions from 2 hours to 10 minutes
- Overcome knowledge gap in a short time period – self-learn machine learning, convolutional neural networks, and computer vision principles

Opensource developer, copywriter, and collaborator – Oppia Foundation (oppia.org) — Oct 2018 – Now
- Actively contribute to opensource codebase that brings online education to children
- Design Docker interface to empower 100+ developers of Oppia through reliable codebase setup, ultimately affecting 430,000 students worldwide
- Implement a Takeout feature in Python to allow users to manage their data

Data protection software engineering intern – Commvault // Lincroft, NJ — June 2018 – Aug 2018
- Engineered methods to access a C++ network file system API in Python, improving the testing and error handling system
- Self-learned C++ in 1 week to ensure a smooth entrance to the internship

Individual researcher – Computer Simulation of the Buddhist Mind — Jul 2017 – Jan 2018
- Researched information in a Buddhist encyclopedia to invent first-of-its-kind primitive computer simulation of the mind in Python
- Modeled decision-making, learning, and memory processes

Project manager – New Jersey Institute of Technology // Newark, NJ — Oct 2016 – Sep 2017
- Initiated app to teach children the card game bridge and received $20k funding
- Led 5 college students in developing a standalone application in Python that received positive feedback from 40 elementary school students in NJ

ONGOING ACTIVITIES

Stanford Code the Change // Team Lead (codethechange.stanford.edu) — 2018 – Now
- Lead team of students to provide technical assistance to nonprofit through software development

Stanford Virtual Reality // Financial Officer (rabbitholevr.org) — 2018 – Now
- Manage and raise organization funds for VR conference and communicate with clarity as the club liaison

Stanford University Mathematical Organization // Coordinator (sumo.stanford.edu) — 2018 – Now
- Coordinate annual Stanford Math Tournament for high school students and Stanford Puzzle Hunt

SKILLS: Python, C++, C, Unity (C#) // NumPy, OpenCV // research, code optimization, self-learning