Eric Ngo

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Education

University of California, San Diego   *September 2017 - December 2021*
B.S. in Mathematics - Computer Science | Minor in Cognitive Science
3.4 GPA

Experience

Project Lim[b]itless   *June 2019 - Current*
Undergraduate Research Assistant | Lead Software Developer

- Research for creating prosthetic sockets using semi-automated smartphone photogrammetry, computer aided design, and additive manufacturing.
- Redesigned and developed a specialized camera application for 3D object scanning; designed on Adobe XD and developed in Android with Firebase backend for user account creation and cloud storage for images.
- Leveraged the Android Sensor Framework to create a process that streams and filters hardware sensor data to automate photo capturing.

Engineers Without Borders UCSD   *September 2019 - Current*
Project Lead

- Leading a team through the development/deployment of a full web service for educational outreach and preparing them with valuable insight into Agile Development practices.
- Developed an entire web service using the Django framework; leveraging the URLs and Views to link the different pages, the Templating to embed simple logic in HTML files, and the Admin system for management.
- Created a PostgreSQL database using the Django ORM to streamline a Blog Post.

UCSD CSE Department Tutor   *January 2020 - Current*
Data Structures/Object Oriented Programming/Software Engineering Tutor

- Help students become effective problem solvers and debuggers by helping them understand their code with debugging tools such as GDB, JDB, and Valgrind.
- Help students understand data structures and how to implement them with proper design patterns.
- Assist in weekly labs intended to introduce new software tools to students such as React, Docker, AWS, etc.

Projects

RetroHub

- Custom Github Profile viewer to display all of a user's important information in a reto themed website.
- Leveraged Github REST API, GitHub Polyglot, and web-scraping (with cheerio) to collect user data and Chart.js to display it.
- Developed with React and React-Router to handle Client-side routing with an Express backend to hande API requests. (Hosted on Heroku)

Note Keeper

- Online note keping application built with a React frontend, Express backend, and MongoDB.
- Utilized Axios to make calls to my Express server through a proxy set up in React.
- Integrated Pasport Js and Passport-Local-Mongoose to leverage local cookies/sessions and allow for secure account creation.