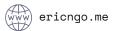# Eric Ngo

Undergraduate Student//Full-Stack Engineer

✉ e7ngo@ucsd.edu 📱 (909) 510-9491 ⭘ github.com/ericngoo 🌐 ericngo.me in linkedin.com/in/ericngoo

Experience

Qualcomm Institute - UC San Diego Division of Calit2
Undergraduate Research Assistant//Software Engineer

06/2019 - Current

- Co-authored a research publication, titled "Smartphone Telemedicine: A Novel Workflow for Creating Prosthetic Sockets Using Semi-automated Photogrammetry".
- Developed a specialized Android Application with Java to stream and filter a phone's accelerometer and magnetometer sensor data to carry out a capture sequence of photos in a 360 field around an object.
- Engineered a pipeline to store and send images to the cloud using Firebase Authentication REST API.
- Achieved submillimeter accuracy and precision in 3D models generated from photos captured with application.

UCSD CSE Department Tutor
Data Structures//Software Engineering Tutor

01/2020 - Current

- Facilitated problem solving and debugging by enforcing the use of debugging tools: GDB, JDB, and Valgrind.
- Reinforced the concept of object-oriented design and aided students in understanding various data structures.
- Oversaw weekly labs that introduced new software tools to students such as React, Docker, AWS, Linux...
- Lead weekly office hours to help students learn web technologies including HTML, CSSS, JavaScript, React.js and more.

Engineers Without Borders UCSD
Project Lead//Full-Stack Engineer

09/2019 - Current

- Formed a team of 8 undergrad engineers to spearhead a local onine educational outreach platform.
- Introduced the importance of Agile Development and organized weekly stand-up meetings with weekly goals.
- Taught effective Python workflow by incorporating virtual environments and GitHub for version control.
- Leveraged the Django framework to bootstrap a full stack web app with a PostgreSQL and Heroku back end.

Education

University of California, San Diego

09/2017 - 12/2021   3.53 GPA

Bachelor of Science in Mathematics - Computer Science with a minor in Cognitive Science

Projects

RetroHub

09/2020

- Mobile-first, user friendly web app to view a Github profile in a Retro theme.
- Leveraged Github REST API and numerous JavaScript libraries for rich data visualization in a responsive design.
- Designed wireframes with Adobe XD to strengthen UI/UX skills, developed and styled with React and SASS, with a Node.js back end, deployed on Heroku.

ericngo.me

09/2020

- First iteration of my personal website built with React, SASS, CSS Flexbox.
- Designed wireframes in Adobe XD and developed with a fully responsive mobile-first design with media queries.
- Developed with heavy use of JavaScript, CSS (SASS), HTML to make an adaptive user interface, suitabe for all devices.

Note Keeper

08/2020

- Full-stack web app with a responsive design to mobilize online note taking.
- Leveraged React front end for reusable components with Node.js back end and Express.js for server routing.
- Organized a NoSQL database with MongoDB to utilize local cookie/sessions to allow secure account creation and user specific notes.