FACULTY MENTOR
Edward Wang

PROJECT TITLE
Smartphone-based Medical Monitoring and Interventions

PROJECT DESCRIPTION
The ubiquity of smartphones has imbued our society with a new infrastructure of sensors and computational resources. This new infrastructure presents an opportunity to reimagine the way we build an ecosystem of medical devices. In this project, the DigiHealth Lab of UCSD ECE is developing a suite of noninvasive health monitoring solutions to enable average smartphones in everyone's pocket to measure vitals (i.e., blood pressure, hemoglobin, oxygen, arterial stiffness, voice analysis) and provide intervention for a variety of health domains (i.e., autism spectrum disorder, breastfeeding, Alzheimer's Disease, cardiovascular disease, sleep). Involvement in this project will involve the development of a custom smartphone application, resolving sensor signals with signal processing, and sense-making through machine learning and deep learning.

This project will be in person.

INTERNS NEEDED
➢ 2

PREREQUISITES
➢ Python Programming, Mobile Programming, Embedded Prototyping.