



## **FACULTY MENTOR**

Schurgers, Curt

## **PROJECT TITLE**

Engineers for Exploration

## **PROJECT DESCRIPTION**

Engineers for Exploration, or E4E, (<http://e4e.ucsd.edu>) is a one of kind program promoting multidisciplinary and collaborative research projects with the broad goals of protecting the environment, studying wildlife, uncovering mysteries related to cultural heritage, and providing hands-on learning experiences for undergraduate students. We team student engineers with scientists from a wide range of disciplines to create innovative technologies that are deployed around the world. Our projects have seen us collaborate with scientists at San Diego Zoo Global, Scripps Institution of Oceanography, National Geographic and various other institutions. Our goal is to develop prototype systems that are then jointly deployed in the field, providing the engineers with the real constraints of practically deployable systems and the domain scientists with the new technological tools they critically need. Last year, students worked on projects including machine learning on aerial footage and audio clips, VR visualizations, wildlife radio telemetry tracking, image processing for tracking baboons, and more.

This project can accommodate both remote and in-person students

## **INTERNS NEEDED**

10

## **PREREQUISITES**

We place a high value on prior experience, specifically related to system building and advanced software development. This could be, for example, working with machine learning, embedded software (e.g. Raspberry Pi, Jetson, etc.), SLAM algorithms, virtual reality systems, etc... In your application, include all relevant experience and describe in detail what you did.