

# Khue Tran

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## EDUCATION

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**University of California, Irvine**  
*Biomedical Engineering, B.S*

Sep 2020 - Jun 2022  
GPA: 3.44

**Irvine Valley College**  
*Biomedical Engineering*

Aug 2018 - Aug 2020  
GPA: 3.55

## PROJECTS

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### Heart Rate Monitor

- Designed a fingertip heart rate monitor using a photodetector and an Arduino Kit to trace the pulse on the finger.
- Developed a LabView program to analyze the feedback wavelength from the infrared LED on the finger.
- Performed prototype testing and evaluation to verify that the product achieves the criteria with up to 90% accuracy.

### External Fixator

- Designed parts of an external fixator for children between 7-12 years old using SolidWorks.
- Assembled all components to create the prototype using a 3D printer.
- Simulated and analyzed stress and force from the arm on the fixator to find materials that best meet the criteria.

### Hearing Aid

- Designed the schematic drawing of the device using Fritzing and built a cost-effective prototype.
- Delivered an effective presentation of the project to the Biomedical Engineering Society at UC Irvine.

### Cerebral Palsy Headrest

- Propose an engineering drawing design for a customized headrest support that meets the needs of the customer.
- Conduct stimulation fatigue testing on the prototype and select appropriate materials to assure the durability of the device.
- Generate a quality test for the prototype that includes methods for executing load to failure and impact tests.
- Assemble the initial prototype using affordable off-the-shelf components.

## WORK EXPERIENCE

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**TRIO Scholars Program | University of California, Irvine**  
[\*Peer Tutor\*](#)

Sep 2020 - Present

- Assist 50+ students in reviewing mathematics, statistics, physics, and chemistry concepts, guide them through problems step-by-step, and give them advice on studying efficiently.
- Design newsletters and flyers for events and workshops.
- Organize virtual social events for students to de-stress and help them connect to faculties and alumni.
- Input data trackers of students' attendance and record their academic performance and services.
- Utilize digital platforms such as Canva, Canvas, Zoom, TeamViewer, and Google applications to engage students towards TRIO tutoring.
- Train new recruits and give them a successful transition to their position.

## SKILLS

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- **Technical:** MATLAB, LabView, SolidWorks, Fritzing, Digital Oscilloscope, Multimeter and Wave Power Sources, Circuit and Electromagnetic Equipments, Medical Devices/Instrumentation Design, Microsoft Office, Canva
- **Languages:** English (proficient), Vietnamese (native)