

Kelvin Jou

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EDUCATION

UC Santa Barbara - B.S. in Computer Engineering

Expected: June 2028

EXPERIENCE

UCSB Human-AI Integration Lab, Goleta, CA

November 2024 - Present

Undergraduate Research Assistant under Prof. Misha Sra

- Joint research project with APOSSIBLE focused on human-computer interaction and spatial awareness

Irvington Cube Satellite, Fremont, CA

August 2023 - February 2024

Image Processing Lead

- Led a team of 6 in onboarding software that sends packets of images taken by the satellite camera. Executed practical solutions to address satellite tumble optimized with machine-learning image stabilization. Worked closely with the Structures and Communications subsystem team to facilitate compatibility with hardware

San Jose State University Computer Science Department, San Jose, CA

June 2023 - September 2023

Cryptography Researcher

- Extracted trainable features from 100k malware binaries using Python scripts for opcode sequences, byte histograms, and heatmaps; manipulated low-precision bits in neural network models (RNN LSTM, CNN DenseNet121) to study accuracy impacts. Accelerated with NVIDIA's cuDNN
- Co-authored a [paper](#) to present research findings

JoeLiu Foundation (nonprofit by Techlink Ventures), Fremont, CA

July 2023 - August 2023

Mobile Application Developer

- Developed a Flutter app promoting lifestyle habits for chronic illness prevention, achieving 250+ downloads and 20+ daily active users; adhered to WCAG guidelines for front-end interfaces
- Integrated Azure-based video streaming and implemented a BERT NLP model for content summarization

Serv, Fremont, CA

December 2021 - June 2023

Co-Founder

- Developed and launched [Serv](#), an award-winning iOS app using SwiftUI and UIKit to promote post-pandemic student volunteering; integrated secure event check-ins, leaderboards, and interactive maps, earning 1st place in a Major League Hacking competition.
- Partnered with local nonprofits to create a cross-platform event management portal in Flutter, allowing hosts to list upcoming events and engage users through continuous feature updates.

Transizion, Washington D.C. (remote)

December 2022 - February 2023

Web Application Contractor

- Utilized MySQL and Python for automated web scraping public government database university stats.
- Developed an online tool that allows students to brainstorm passion projects using GPT's Davinci-003 model

Projects

ExpressFlip, Fremont, CA

July 2024 - September 2024

- Published an iOS app that uses ARKit and SceneKit to help musicians paginate sheet music PDFs through facial expressions

QUEST Capstone Project, Fremont, CA

August 2023 - May 2024

Assistive Technology Researcher

- Researched the scope, severity, causes, consequences, and solutions for insufficient software accessibility for people with hidden disabilities and delivered testimony to school faculty, community members to share research findings and defend my solution
- Conducted interviews with a Purdue professor and an Accessibility Engineer from PayPal

SKILLS

Languages: Swift, Python, C++, Java, Dart, Javascript

Frameworks & Libraries: Firebase, AWS (DynamoDB, Lambda), Realm, React, Flutter, Next.JS, PostgreSQL, TensorFlow