

Manoj Elango

Passionate creator of applications dedicated to building innovative solutions.

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Education

University of California, Davis

Bachelor of Science in Computer Engineering

Expected June 2025

Relevant coursework: Intro to Programming in C, Object Oriented Programming in C++, Data Structure, Digital and Analog Systems, Distributed Ledger Systems, IOS Development, Fully Distributed Ledger System,

Experience

President | Google Developer Student Club @UCDavis

September 2023 - Present

- Leading one of the largest tech clubs of 27 board members to provide more than 150+ students with tech resources to build projects.
- Creating bootcamps, recruiting tech associates, tutoring workshops and planning tech events in the club.
- All in the field of programming (websites, apps, machine learning/AI and more)[Leadership, Team Management]
- Previously Tech Director mentoring teams to build innovative mobile development projects

VP of Software | SachHacks

June 2022 - Present

- Helped to promote and advertise SachHacks through emails and multiple social media platforms and increased the number of the participants in the discord server by around 70+ students.[DiscordPy Bot]
- Worked on building the yearly website for Sachacks and a Discord Bot in Python
- Created Software to host Sachacks 2025 with over 500 members. sachacks.io

Director | Swift Coding Club@UCDavis

September 2024 - Present

- Creating a community of over 100+ IOS developers to create swiftUI apps.
- Guiding students on AGILE Developments and Startup Product Pitches to create innovate solutions

Jr. Systems Software Engineer | Ravata Solutions(Startup) @Davis

March 2023 - September 2024

- Worked on STM32 Microcontrollers and communication via UART & SerialInterface in C/C++
- Constructed GUI interface in Python and C# to communicate with Microcontrollers and GCP Buckets.
- Worked on FFT and Improving the live Peak Detection Algorithm and testing features using Matplotlib.
- Conducted debugging using Ozone and RTT Viewer to identify and resolve issues in the embedded system.

Open Source Blockchain Researcher | ResilientDB @ UC Davis

September 2023 - Present

- Worked on creating an IOS app that connects directly to the well known open source Apache Certified fully distributed ledger system ResilientDB and part of this organization.
- Continuing to work on improving this software and exploring new features to add. [Docker, Linux, Cloud, GraphQL, ReactNative] <https://blog.resilientdb.com/2023/12/17/CryptoGo.html>

Personal Projects

KHAO | ReactJS, Firebase, OpenAI API, OCR

- Designed a recipe-suggestion app that scans grocery receipts and suggests meals using OCR and AI.
- Engineered a custom OCR pipeline and integrated OpenAI's GPT-3 via Firebase for intelligent recipe matching based on detected ingredients.

Terra AI | ReactJS, TypeScript, Tailwind

- Built a clean and responsive web interface for Terra AI's services to showcase dynamic features.
- Used React and TypeScript with Tailwind CSS; handled API-based AI service orchestration for seamless data flow and user interactions.

WiseGenie | ReactJS, Node.js, TypeScript

- Developed an audio-following system using real-time DSP on embedded hardware.
- Implemented full audio controls and signal-following logic; evaluated system using dev boards.

Portfolio Website | SvelteKit, TypeScript, CSS

- Created a personal website to showcase projects, blogs, and live Spotify status.
- Implemented with SvelteKit and TypeScript; featured real-time Spotify API integration with auth refresh and markdown rendering for blog content.

ChatBot Research Project | OpenAI's API, Chatbots, ReactJS

- Developed a dual-chatbot web platform with two AI bots trying to persuade you to donate to a cause.
- Focused on prompt engineering strategies to analyze persuasive effectiveness; used React for front-end and integrated OpenAI's GPT API for conversation logic and comparative response tracking.

SKILLS

Languages - Python, C, C++, HTML5, CSS, Javascript, Flutter and Dart, Lua, R, ReactJs, Svelte

Softwares - Filmora X, Figma, Pico 8, Unity

Tools: Github, Unix, Jira, BitBucket, Firebase, Microsoft Azure, Google Cloud Platform, Jupyter Notebook