# Vishal Shenoy

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# EDUCATION

## University of California, Davis

Davis, CA

B.S. in Computer Science and Mathematics | 3.8 GPA

exp. June 2025

- Coursework: Data Structures, Algorithm Design and Analysis, Object-Oriented Programming, Discrete Math
- Organizations: Project Manager at Aggie Sports Analytics and Software Engineer at AggieWorks

## Experience

Engineering Intern

March 2024 – Present

Conviction

San Francisco, CA

• Building internal tools to automate infrastructure at a venture capital firm serving AI-native companies

Student Researcher

May 2023 – Present

UC Davis HRVIP Lab

Davis, CA

- Leading the development of computer simulations for the MATRIKS Trinity project
- Trinity is a NASA-funded effort to understand the neuroscience behind astronaut training on Mars

Student Researcher

June 2020 — May 2023

Stanford University — Department of Vascular Surgery

Stanford, CA

- Built Vascular1, a virtual reality surgical training tool for ultrasound guided vascular access procedures
- Published an IEEE conference paper on the development of the VR module and results of clinical trials

Student Researcher

June 2021 — Jan 2022

Stanford University — Department of Radiology

- Built CovXR, a machine learning algorithm for the automated detection of COVID-19 pneumonia in chest X-rays
- Achieved a novel accuracy of 95.5% in disease detection and published an IEEE conference paper on the algorithm

#### Projects

coverart.lol TypeScript, React, NodeJS, DALL-E

January 2024

• Developed a generative AI service which allows users to automatically create cover art for Spotify playlists

**DropDoc** ☑ | Python, JavaScript, React, LangChain, ChromaDB

- Developed an LLM-driven chatbot that allows users to interract with multiple documents in one session
- Implemented support for multiple file formats, including pdf, txt, and doc files

tldw 🗗 | Python, JavaScript, React, OpenAI GPT-4, Whisper

August 2023

- Developed an AI-powered video summarization platform utilizing LLMs and a speech recognition model
- Implemented embedded notes, semantic search, and short-form video clipping features

Eleven 🗗 | Python, JavaScript, React, BeautifulSoup, S-BERT

June 2023

• Developed a low-latency semantic search engine for UC Davis undergraduate courses

## **Publications**

IEEE BIBM Paper 🗹 | Vascular1: Development and Evaluation of a Virtual Reality Ultrasound Guided Vascular Access Training Module

IEEE SSCI Paper 🗹 | CovXR: Automated Detection of COVID-19 Pneumonia in Chest X-Rays through Machine Learning

# Awards

Apple Swift Student Challenge Winner · Eagle Scout with Bronze Palm · UC Davis Engineering Dean Honor List (x3)

#### Technical Skills

Languages: Python, C, C++, C, Java, JavaScript, TypeScript, HTML, CSS, Swift, x86 assembly

Workflows: Web Development, Game Development, VR Development, App Development, Computer Vision, Applied AI

Libraries and Tools: Tensorflow, Keras, Pandas, LangChain, OpenAI API, React, Node, Git, Unity, Xcode