# Vincent Liu

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## Experience

UXLv

Jan - May, 2025

Software Engineer, Machine Learning Intern

San Francisco Bay Area, Remote

- Demonstrated ability to take initiative and work independently on assigned tasks
- Managed personal workload effectively, meeting deadlines and expectations

### UCSC Baskin School of Engineering

Jan - Mar, 2025

Reader

Santa Cruz, CA

• Evaluated and provided feedback on student assignments related to software engineering principles, including Agile and Scrum

### Education

University of California, Santa Cruz

2021 - 2025

Bachelor of Science - B.S. Computer Science

EL Cerrito High School High School Diploma 2017 - 2021

Relevant Coursework:

Programming Languages & Tools	Software & Web Development	Theory / Foundations
C / C++ Programming	Full Stack Web Development I	Data Structures and Algorithms
Assembly Language and Lab	Software Design Project $I + II + III$	Introduction to Algorithm Analysis
Abstract Python	Software Design Project IV (Accel.)	Cryptography
Introduction to Computer Graphics	Engineering Principles of Electronics	Computer Architecture
	Computer Systems Design	Computational Models

## **Projects**

Cognoso: AI Driven Flashcard Generator

Typescript, React, Node.js, LlamaParse, LlamaIndex

- Website for students to create and manage flashcards for studying. Features include PDF text extraction, Automated Flashcard Generation, and a Chatbot that answers questions based on provided PDFs (e.g., textbooks).
- UXLy Multi-tool Customer Support Chatbot: Typescript, Node.js, LlamaParse, LlamaIndex, LangChain, LangGraph
- $\bullet \ \, \text{Multi-Tool AI Chatbot that Manages dialogue context, Offers product recommendations, and Handles order management.}$

SecureAI: GitHub Repository Vulnerability Scanner

TypeScript, Python, React, Node.js

- Full-stack tool to scan public GitHub repositories for security vulnerabilities and malicious files using Gemini and GPT models
- Allows Users to visualize vulnerabilities by severity, along with AI-generated explanations and recommended fixes
- Automates code review and threat detection across diverse codebases

NoteSheet Editor: Exam CheatSheet Generator

 $Python,\ JavaScript,\ React,\ ReportLab$ 

- Utilizes backend algorithm inspired by 2D knapsack problem to optimize whitespace usage and layout efficiency for PDF generation
- Developed a React + TypeScript frontend with a clean, interactive UI for note entry, real-time formatting preview, PDF generation, and structured export

### Handwritten-Digit-Recognition:

Python, PyTorch,

• Utilizes a Convolutional Neural Network (CNN) built with PyTorch to recognize handwritten digits from the MNIST dataset

## Skills & Achievements

- Skills: Team Leadership, Communication, Adaptability, Problem Solving, Quick Learner
- **Programming Languages:** Python, C, C++, JavaScript (JSX), TypeScript (TSX), Haskell, Assembly, SQL
- Frameworks & Tools: React, Node.js, Express.js, Flask, WebGL, Docker, Figma, FastAPI, PyTorch, ReportLab
- Software Principles: Agile & Scrum, TDD
- Language Proficiency: English, Burmese (Bilingual), Japanese (Certified Biliteracy)

## Honors, Awards, and Certificates

- Information Systems Design and Management Issued by Information Technology Academy, Jun 2021
- State Seal of Biliteracy (Japanese) Issued by State of California, Jun 2021