

FELIX DENG

Berkeley, CA | fxdeng@icloud.com | felixdeng.xyz

EDUCATION

University of California, Berkeley

B.A. in Computer Science

Coursework: CS 61A, Math 54, Bioengineering 10

Expected May 2030

Berkeley, CA

TECHNICAL SKILLS

Languages: Python, C++, C#, JavaScript, HTML/CSS

Frameworks & Tools: Unity, Express.js, MongoDB, Bootstrap, OpenAI API, Gemini API

TECHNICAL EXPERIENCE

Companion Connect

Aug. 2023 - Aug. 2025

Founder | AI-Powered Nonprofit

Remote

- Built and scaled an AI-powered support platform to 500+ daily users and 60,000+ conversations, integrating OpenAI APIs, persistent conversation storage, context-aware response generation, and sentiment tracking.
- Implemented sentiment tracking and emotional-context analysis within the conversational pipeline to adapt supportive responses and inform product analytics.
- Recruited and led a 20-member volunteer team and expanded partnerships with schools and youth organizations, supporting 10,000+ user affirmations.

California State Polytechnic University, Pomona

Jun. 2025 - Oct. 2025

AI Research Intern | Prof. Yu Sun | Software Engineering and Mobile Cloud Computing Lab

Remote

- Built and evaluated components of Companion Connect using OpenAI APIs, developed data-analysis tools, helped design a 15-participant user study, and analyzed participant outcomes.
- Co-authored and presented peer-reviewed research at the 11th International Conference on Artificial Intelligence and Applications (AI 2025) on an AI-enhanced platform for reducing student loneliness and promoting well-being.

Computing for All

Oct. 2024 - Aug. 2025

Software Development Pre-Apprenticeship Intern

Remote

- Delivered 3 web projects using JavaScript, HTML, and CSS, applying front-end development, debugging, responsive design, and iterative testing to turn requirements into working user experiences.

SELECTED PROJECTS

Visual Prompt Engineering Research

Jun. 2024 - Nov. 2024

Researcher | Generative AI, LLMs, Diffusion Models

- Designed controlled experiments comparing text-only prompt refinement with visual prompt engineering, combining LLM story generation, diffusion-generated visuals, and systematic output evaluation.
- Published peer-reviewed research on visual prompt engineering and narrative efficiency; follow-up experiments found 39-52% fewer iterations to reach matched story-quality targets.

Corporatify

Jul. 2025 - Aug. 2025

Full-Stack Web Application | Express.js, MongoDB, Gemini API, Bootstrap

- Built an end-to-end generative AI application that converts plain English into corporate-style language using an Express.js backend, MongoDB database, Gemini API integration, and responsive front-end flows.

Robot Rush & Hunt the Wumpus

Apr. 2024 - Present

Unity / C# Games | AI Gameplay

- Drove 800+ combined app downloads by developing, publishing, and iterating on two Unity/C# games; won 1st place in Microsoft's Hunt the Wumpus game-development competition.

SELECTED PUBLICATIONS

3 peer-reviewed publications: AI 2025; Journal of Student Research, 13(4); National High School Journal of Science.

LEADERSHIP & AWARDS

Video Game Development Club President: Grew membership 80% (35 to 63) and coached 2 teams to Microsoft competition wins.

TEDx Organizer & Speaker: Produced an 80-person, 5-speaker event and delivered a talk on transforming loneliness into growth.

Honors: USACO Gold Qualifier; AIME Qualifier; DECA State Qualifier; Eagle Scout with Gold Palm; led 80 scouts across 300 service hours.