YUANBO PANG

■ yuanbopang@gmail.com · **** (+1) 408-460-7526 · **in** YuanboPang · **** YuanboPang

EDUCATIONAL BACKGROUND

Stanford University (Summer Session)

Stanford, CA | Summer 2025

CS 229: Machine Learning

University of California, Berkeley

Berkeley, CA | 2025 – 2027

Bachelor of Science in Electrical Engineering and Computer Sciences (EECS)

De Anza College & Foothill College

Cupertino, CA & Los Altos Hills, CA | 2023 – 2025

Phi Theta Kappa Honor Society Member

Academic Director of Quantum Club | President of Data Club | Vice President of Envir Econ Club

Associate Degree, Computer Science

mputer Science GPA: 4.0/4.0

Relevant Coursework: Java, Python, C++, Physic 4A-4D

Online Courses

Deep Learning (5-Course Specialization) offered by DeepLearning.AI

Mar - June 2024

SKILLS

- Programming Languages: Python, C++, Java, Swift, HTML
- Professional Skills: PyTorch, TensorFlow, NumPy, Pandas, FastAPI, MongoDB, Auth0, OpenCV
- Data Science Skills:Machine Learning, Data Science, Neural Networks, Data Analysis, Large Language Models, Computer Vision

WORK EXPERIENCE

AI Platform Software Engineering Intern, Geopogo

Berkeley, CA | Fall 2025

- Architected AI-powered multimodal generation platform integrating advanced language models and diffusion-based synthesis for architectural visualization workflows.
- Engineered scalable inference pipeline with adaptive credit allocation system and real-time generation monitoring.
- Deployed production-grade application with automated continuous integration and optimized model serving infrastructure.

Research Intern, Stevens Institute of Technology (Prof. Hao Wang) Hoboken, NJ | July 2024 - Present

- Conducting graduate-level research focused on protecting local data, enhancing personalized learning, and optimizing security protocols.
- Applied advanced machine learning methodologies, including neural network frameworks like PyTorch and Tensor-Flow, to accelerate personalized federated learning and reinforce data security through differential privacy techniques

Student Ambassador, Fetch.AI Innovation Lab Cambridge, UK / San Francisco, CA | October 2024 - Present

- Mentored and evaluated technical projects at CalHack 11.0 (UCB Hackathon) and SF Hacks, facilitating clear communication between technical teams and participants.
- Assisted over 20 teams in resolving technical issues, offering guidance on both front-end and back-end development.
- Led a large-scale workshop for hundreds of participants, helping to co-organize the event and motivate participants to achieve their project goals.

ACADEMIC EXPERIENCE

AI-Powered Mario Level Generator | *LLaVA*, *Modal*, *FastAPI*, *React*, *OpenCV* Cambridge, MA | Sep 2025 Won [Modal Sponsor Prize] *HackMIT* 2025

• Built end-to-end system transforming hand-drawn sketches into playable Mario levels using computer vision and large language models.

- Integrated LLaVA 1.5 for sketch interpretation and deployed H100 GPU inference on Modal cloud platform for real-time processing.
- Developed FastAPI backend and React frontend with OpenCV integration, enabling seamless game generation from drawings.

Stud.ai | FastAPI, React, Python, Fetch.ai

Cambridge, MA | Sep 2024

Won [Smartest AI Agent] HackMIT 2024

- Streamlined assignment completion by generating step-by-step timelines based on descriptions and rubrics.
- Automatically scheduled suggested work periods in students' available calendar slots.

Green Energy Sustainability Study pytorch, pandas

De Anza College | Apr - Jul 2024

- Led team comparing Kirsch Center's energy use & environmental impact to a gas-powered building.
- Developed Python scripts to analyze real-time energy usage data and visualize differences in cost-effectiveness.

Robotic-Arm Project, Engineering Club, Foothill College

Apr - Jul 2024

- Developed an end-to-end chess piece recognition and control system using a UR10 robot with custom hardware and software.
- Implemented ResNet-50 for piece detection and utilized Azure Kinect SDK for image processing.

Golden Groceries | FastAPI, React, Python, Node.js

Berkeley, CA | Jun 2024

- Created a system for seniors to track nutrient intake from food photos, with data shared securely with healthcare providers.
- Integrated ChatGPT for data analysis and used You.com for real-time restaurant searches.

GetResearch | FastAPI, React, PostgreSQL, PropelAuth

Davis, CA | Apr 2024

Won [MLH - Best DomainHackDavis] HackDavis 2024

- Led development of a platform connecting students and professors for research collaboration, improving visibility and accessibility.
- Implemented FastAPI, React, PostgreSQL, PropelAuth, and AWS back-end services.

ClearSight | FastAPI, React, JavaScript, MongoDB

Berkeley, CA | Feb 2024

Team Project | Team Leader Won [Hack for Financial Transparency] Hack for Impact 2024

- Developed a financial transparency tool using the HCB Transparency Mode API for real-time data.
- Created an intuitive, customizable dashboard with advanced visualization and interactive features.

SlugHug | *React*, *JavaScript*, *MongoDB*, *Auth0*, *Axure*

Santa Cruz, CA | Jan 2024

Won [Health Hack Second Place] and [Sponsor - Axure] CruzHacks

- Integrated Auth0 with MongoDB using React, ensuring secure data storage.
- Contributed to UI/UX design with a playful, character-based theme.

AI-Enhanced Classroom Assistant for Interactive Learning | Python, JS, C# Cupertino, CA | Oct 2023 Won [Best API] De Anza Hack 2.0

- Led a project integrating AI as a teaching assistant to improve student learning efficiency.
- Implemented Vosk-powered live speech recognition and integrated OpenAI API for real-time content analysis.

Modal Sponsor Prize, HackMIT (MIT)	Sep 2025
Smartest AI Agent, HackMIT (MIT)	Sep 2024
Sponsor - Hack Foundation, Hack for Impact (UCB)	Feb 2024
MLH - Best Domain, HackDavis (UCD)	Apr 2024
Health Hack Second Place and Sponsor - Axure, CruzHacks	Jan 2024
Best API, De Anza Hacks	Oct 2023
First Prize, Jiangsu Province Chinese National Physics Olympiad	2022