Ethan Zhou

xethanhzhou@gmail.com | Linkedin: @ethannhzhouu | ethannhzhouu.vercel.app | Github: @ethannhzhouu | Los Angeles, CA

Engineer bridging software and data to deliver impactful solutions. Proficient in Python, JavaScript, and SQL with experience across ETL pipelines, CI/CD workflows, and production deployments. Committed to leading projects and building systems that are reliable, scalable, and meaningful.

SKILLS

Programming Languages: Python, SQL, R, Java, JavaScript, TypeScript, HTML/CSS
Frameworks & Libraries: React.js, Next.js, Node.js, Tailwind, Flask, PyTorch, NumPy, scikit-learn, pandas
Industry Tools: Git, Tableau, PowerBI, AWS, PostgreSQL, Docker, Kubernetes, Excel

WORK EXPERIENCE

Apple (via INSPYR Solutions)   July 2024 - July 2025
Project Manager - AI/ML Data Operations   *Cupertino, CA*
- Engineered **Python** automation for large-scale file search and detection, **reducing manual tracking overhead by ~80%**.
- Built data processing and transferring workflows for **S3** to manage terabytes of multimodal data for client use.
- Designed and maintained reporting pipelines using **pandas** and **Excel** to monitor metrics, ensuring completion by deadlines.
- Collaborated with engineers to integrate accessibility features into Apple's ecosystem, enhancing usability for deaf and hard-of-hearing users.

Google (via Cognizant)   November 2023 - June 2024
Technical Support Engineer - Augmented Reality   *Mountain View, CA*
- Developed automation in Google Sheets to capture KPIs and improve monitoring across data collection pipelines for AR glasses and headsets.
- Debugged and maintained technical documentation for AR collection workflows, improving throughput and reliability across **300+ sessions**.
- Partnered with engineering teams to validate and refine AR ML model inputs, accelerating product feedback.

AICamp   May 2023 - September 2023
Software Engineer Intern - ML Platform   *Palo Alto, CA*
- Built a web scraping pipeline integrating **OpenAI API, LangChain, and Google Search API** to extract and process **15,000+ contacts**.
- **Improved system scalability and customer outreach by ~37.5%** through data extraction and automation.
- Led a 5-member engineering team in developing curriculum and software projects, **mentoring 100+ students** in full-stack and ML applications.
- Oversaw deployment of 10+ student-built LLM projects, and achieved an average mentor rating of 9/10.

AICamp   May 2022 - September 2022
Data Science & Machine Learning Intern   *Palo Alto, CA*
- Developed a GPT-2 text generation model and deployed it on a Flask-based web application for **live demos by 100+ users**.
- Built and deployed **a React Native survey app**, enabling dynamic data collection similar to Google Forms.

PROJECTS

Content Creator @frenzysstudio on TikTok & YouTube | *LLMs, Sora 2, Veo 3, CapCut, Adobe Suite*   September 2025 - Present
- Prompt engineered optimal AI prompts and workflows to generate and edit cinematic animated visuals, **achieving 477K+ views, 18K+ likes, and growing 1K+ followers within two weeks.**
- Applied data-driven iteration and **A/B testing** on prompt structures and content strategies to analyze engagement metrics, **boosting average view count by 240x**.

Portfolio | https://ethannhzhouu.vercel.app/ | *Next.js, React.js, TypeScript, Tailwind*   August 2025
- Built a responsive, interactive macOS-inspired UI with 13+ embedded apps using **Next.js, React.js,** and **TypeScript**.
- Engineered interface with light/dark mode, brightness slider, and system lifecycle features (boot, sleep, shutdown).
- Deployed on **Vercel** and documented on GitHub for reusable component architecture.

TigerGraph: Fraud Detection in Ethereum Networks | *Python, G-SQL, ML*   January 2023 - March 2023
- Implemented a machine learning model called Topology Adaptive Graph Convolutional Network (TA-GCN) with **Python** and **G-SQL**, with an average classification accuracy of ~**82.2%**, to predict if an Ethereum wallet in the transaction graph is fraudulent or not.
- Documented the effectiveness of graph-based algorithms and traditional ML algorithms to detect fraud in Ethereum networks.

Carbon Reduction with RunBuggy @ UCSD Innovation Sprints | *Python, SQL, Tableau*   February 2022 - May 2022
- Wrote **SQL** queries and Python scripts to process company logistics data, reducing truck usage and mileage for vehicle deliveries.
- Built a k-nearest neighbors model to classify CO_2 emissions with ~**96% accuracy**, optimizing RunBuggy's transporter network.
- Presented project results to **30+ participants on showcase day** with dashboards built in **Python** and **Tableau**.

EDUCATION

University of California, San Diego (UCSD)
B.S. in Data Science, Minor in Cognitive Science. GPA: 3.6

Relevant Coursework: Advanced Data Structures and Algorithms, Data Mining & Web Scraping, Data Visualization, Machine Learning Algorithms, Object Oriented Algorithms and Design, SQL/NoSQL Databases, Systems for Scalable Analytics, Web Development