

Jiahong (Harvey) Li

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I'm a game-focused, research-driven builder who turns messy player data into adaptive systems and real products. I've founded and led small teams to ship analytics-heavy, AI-powered tools, including in-game reflection agents and player models, multi-agent LLM workflows and content pipelines. I'm comfortable spanning experiment design, modeling, and full-stack/infra while communicating clearly with both technical and non-technical partners.

Education

University of California Santa Cruz, San Jose, CA *PhD Student in Computational Media @ GUILab* Expected: Jun 2028

Focus: AI Education, Game Analytics

- Build an **in-game reflection agent system** that performs **knowledge retrieval** and delivers **context-aware suggestions, feedback, and explanations** based on real-time eye-tracking data and atomic player actions.
- Design **interactive visualization and AI-driven analysis tools** that surface behavior models, knowledge graphs, and probabilistic patterns for researchers and non-expert analysts—supporting insight generation and decision making.
- Conduct multimodal player-analytics research (action logs, eye-tracking, interviews) and build Python-based player/NLP models—behavior modeling and reflection tools to analyze strategies, learning processes, and cognitive pattern shifts at scale

Santa Clara University, Santa Clara, CA *M.S. in Computer Science and Engineering*

Graduated: Jun 2023

University of Wisconsin-Madison, Madison, WI *B.S. in Computer Sciences*

Graduated: May 2021

Skills

- **Software Engineering:** Python, JavaScript, TypeScript, C++, C# (Unity), Fastify, Django, Flask, Postgres, MySQL, MongoDB, Redis, React, React Native, Redux, Electron.js, Vue, Node.js, Uniapp
- **Data Science & AI:** PyTorch, TensorFlow, LangChain, LangGraph, LangSmith, LanceDB, Milvus, Pinecone, LlamaIndex, DeepEval, n8n, LLM evaluations, RAG, CoT, Multi-Agent Systems, A/B Testing, User Behavior Analytics
- **DevOps & Cloud:** AWS, GCS, Azure, AliCloud, Git, Docker

Professional Experiences

Panoverse Inc. / Kolect.ai *CTO & Co-Founder* Hybrid at San Jose, CA Apr 2025 - Nov 2025

- Led an **8-engineer full-stack & AI team** to build scalable web, mobile, and desktop applications (Next.js, React, Node.js, Electron.js, Fastify, LangChain, LangGraph, LangSmith, DeepEval, n8n, GCP, AWS, Azure, Postgres, Redis, Docker, Vercel, CLIP, ffmpeg, LanceDB); established engineering processes from prototype to production.
- Architected and developed **multi-agent, tool-calling LLM platforms**, including modular agents for **search, hybrid-retrieval, reasoning, evaluation, and generation**, enabling automated workflows and creator outreach.
- Designed and built backend infrastructure supporting high-volume multimedia pipelines, embedding & semantic retrieval systems, and data orchestration for automated video-editing.

Nanjing Weiyuan Zongheng Technology Inc. *CTO & Co-Founder* Remote at San Jose, CA Jun 2022 - Aug 2024

- Managed a **23-person cross-functional team** to deliver **12+ AI-driven social, career, and education apps** (Java, Objective-C, React, Node.js, FastAPI, Elasticsearch, Postgres, Redis, Docker, Milvus, PM2, Gunicorn, AWS, AliCloud).
- Led product development, designed backend architecture, and managed DevOps across multiple countries and regions.
- Designed and implemented **Generative-AI systems**, including **vector-memory based personalization, recommendation engines, and ML-backed search systems**, enabling personalized user interaction at scale.
- Contributed hands-on full-stack development and mentorship while coordinating across design, marketing, and management - achieving 30,000+ users and sustaining high retention and engagement metrics.

Frugal Innovation Hub at Santa Clara University *Full-stack Developer* Santa Clara, CA Feb 2022 - Jun 2022

- Built a **full-stack web platform** (React, Bootstrap, Spring Boot, MongoDB, AWS, GitLab CI/CD) for Costa Rica NGOs/government, improving UX and feature workflows through iterative collaboration.

uSens Inc. *Deep Learning Intern* San Jose, CA Jun 2020 - Aug 2020

- Developed real-time driver-safety detection models using **multimodal ML** (YOLOv3, gesture analysis, OpenFace).
- Trained pipelines on 102k+ images/videos for smoking/phone/seatbelt recognition.

Visionary Intelligence Inc. *Front-End Engineer Intern* Beijing, China Jun 2019 - Aug 2019

- Implemented user-experience-driven web tools (HTML5/JS/Tomcat) for AI customer-service training data management.

Microsoft *Software Engineer Intern* Beijing, China Jun 2018 - Aug 2018

- Contributed to **C# SDK** components for Azure IoT/Edge; presented Azure cloud/stack tech across internal teams.

Project Experiences

The Wave - Sci-Fi Action Shooter RPG July 2021 - Dec 2021

- Designed and built a **Unity** top-down action **RPG game** featuring adaptive AI, difficulty systems, dialogue, puzzle/weapon mechanics, and custom 3D assets; released as a playable demo on Steam/Itch.io.