Eric Wang

732-492-2378 | eric_wang@college.harvard.edu | linkedin.com/in/ericliwang/ | https://github.com/ericwang1409

Education

Harvard University September 2022 - May 2026
Bachelors of Computer Science and Mathematics. GPA: 4.0/4.0 *Cambridge, MA*
Coursework: Data Structures & Algorithms, Computer Systems, Machine Learning, Databases, Probability
Activities: Harvard AI Safety, Harvard Tech for Social Good, Harvard Computer Society, Harvard Climbing

Experience

LinkedIn May 2025 - Present
Software Engineer Intern *Sunnyvale, CA*
- Built and deployed a Python-based automation service that consumes from Kafka topics, triggers Airflow DAGs and CI/CD pipelines, and automatically certifies software versions to reduce oncall engineer hours by 90% per week
- Enhanced the service with 5 gRPC endpoints to manage the automation service, supporting pause/resume operations and manual component queueing for flexible testing orchestration and to maintain 100% reliability

Redwood Research January 2025 - May 2025
Machine Learning Engineer Intern *Berkeley, CA*
- Conducted AI safety research on early signs of collusion abilities in LLMs between agents and monitors and researched mitigations that
- Developed evaluation methodologies that identified subtle signs of strategic behavior in 3+ AI models, highlighting potential vulnerabilities in oversight mechanisms and wrote a research paper on the results

Harvard University January 2024 – December 2024
Computer Science Teaching Assistant *Cambridge, MA*
- Held office hours and taught weekly recitations for 40+ students, supporting problem sets and theoretical concepts
- CS 121 Theoretical Computer Science (Fall 2024), CS 51 Abstraction and Design in Computation (Spring 2024)

Analog Devices June 2024 - August 2024
Machine Learning Engineer Intern *San Jose, CA*
- Built an end-to-end human activity classification model using PyTorch, pre-trained with self-supervised learning techniques, and fine-tuned on open-source accelerometer data, achieving an average accuracy of 99.3%
- Architected a data pipline to download, process, and clean over 24 TB of accelerometer data, utilizing AWS S3 for storage, EC2 for cloud computing, and parallel processing to speed up data processing sevenfold

Projects

Main-Memory Optimized Column-Store Database | *C, Docker, perf*
- Designed and implemented a cache-conscious column-store database system from scratch in C, optimizing for main-memory access patterns to achieve a 10x speedup over traditional row-store databases
- Added multithreaded shared scans, B-tree indexing, and hash joins to speed up query processing by 5x

Gem Learn (Best use of Gemini API @ SteelHacks) | *React, Supabase, Gemini API*
- Built a AI-powered flashcard web app using React as frontend, Supabase as backend, and the Gemini API to transform chat responses into reviewable flashcards, featuring usage analytics to support long-term learning
- Pioneered a career chatbot tailored for University of Pittsburgh students using Retrieval-Augmented Generation (RAG), enabling semantic search across 500+ university resources and improving guidance relevance.

TaiYo! Solver (Best hack @ HackWellelsey) | *Python, Pymunk, Deep Q-Learning, PyTorch*
- Engineered a custom game from the ground up, utilizing PyGame for engaging gameplay interfaces and PyMunk for accurate physics simulations utilizing object-oriented programming
- Implemented a Deep-Q Learning algorithm to train a model to autonomously play the game using optimal actions over the state space, outperforming over 80% of human players based on comprehensive gameplay metrics

Technical Skills

Languages: Python, Java, C/C++, Javascript, TypeScript, SQL, R, HTML, CSS
Frameworks: React, Next.js, Node.js, PyTorch, Flask, TensorFlow
Tools and Cloud: AWS (S3, EC2), Docker, Git, gRPC, Kubernetes, Linux, Valgrind, MySQL, PostgreSQL