Eric Yang Xu

ericxu@college.harvard.edu

Education

Harvard College Cambridge, MA

Bachelor of Arts in Computer Science and Statistics, GPA: 3.92/4.00 *Graduating in May 2028*

- Relevant Coursework: Computer Science 1810: Machine Learning (A), CS 1200: Algorithms, Computer Science 50: Programming & Web Development, Math 25a: Theoretical Linear Algebra (A), Statistics 110: Probability (A), Statistics 111: Statistical Inference (A)
- Earliest Start Date: May 18, 2026, Latest End Date: August 31, 2026

Experience

Kempner KRANIUM Research Program Fellow June – August 2025

Kempner Institute (Mentors: Professor Venktesh Murthy, Dr. Farhad Pashakhanloo) *Cambridge, MA*

- Built Python-based pipeline using large language models (Gemma3, Llama3.1) & text embedding models (Gemini) to measure representational similarity between odor composition & LLM-generated perceptual embeddings
- Created weekly presentations & poster to present for Harvard faculty, 1 of 12 Harvard undergraduates selected to conduct AI research ($3000 stipend)

Kempner KURE Research Program Fellow January 2025 – May 2025

Harvard University (Mentor: Professor Venkatesh Murthy) *Cambridge, MA*

- Wrote Python-based pipeline that used principal component analysis, t-distributed stochastic neighbor embedding, and UMAP to identify how 1300+ odors cluster based on chemical composition (Scikit-learn, Pandas, Matplotlib)

GRASP Lab Computer Vision Research Intern May 2024 – August 2024

University of Pennsylvania (PI: Professor Jianbo Shi) *Philadelphia, PA*

- Developed Python-based program to modify human poses in selfies while preserving facial qualities using pose estimation, image segmentation models (DensePose, UniHuman), and Delauney triangulation (OpenCV)

Pennsylvania Governor's School for the Sciences Fellow June 2023 – August 2023

Carnegie Mellon University *Pittsburgh, PA*

- Created Java-based program that used the Minimax algorithm with alpha-beta pruning to optimally play an unsolved strategy game called Paper Soccer, beating 99% of human opponents

Projects

News Transcript Classifier (COMPSCI 1810 Final Project) April 2025

Harvard University *Cambridge, MA*

- Trained and fine-tuned a DeBERTa transformer model to identify media channels from text-based news transcripts; achieved 72% accuracy, obtained 3rd highest performance out of 100+ students

Leadership

HackHarvard Technology Co-Director April 2025-Present

Harvard University *Cambridge, MA*

- Built webapp to provide information 2000+ hackers (Astro, Starlight), built interface for sponsors to communicate with hackathon organizers for arranging partnerships (Svelte, Web3Forms), improved accuracy of internal hacker application manager with Algolia Search API
- Oversee website development (hackharvard.io) and internal tools for Harvard's largest undergraduate hackathon

Awards

2025 First-Year Susquehanna International Group Discovery Day Fellow

Mathworks Math Modeling Challenge International Honorable Mention (Top 34 out of 800 teams)

3-Time American Invitational Mathematics Examination Qualifier (Top 5% out of 300,000 participants)

2-Time United States National Chemistry Olympiad Honors Finalist (Top 150 out of 16,000 participants)

Principal Alto Saxophonist in Pennsylvania All-State Wind Ensemble (#1-ranked statewide)

National Merit Scholar (awarded $4000)

Eagle Scout with Bronze Palm