Miriam Kim

NYC/Cambridge | 210-334-9715 | miriamkim@college.harvard.edu | linkedin.com/in/miriamkim04

EDUCATION

Harvard University   Cambridge, MA
B.A. in Computer Science   *May 2027*

- Awards: Omni Blockchain/Web3 Research Symposium Winner
- Organizations: The Harvard Advocate (Tech Board), Augmented/Virtual Reality Club (Co-President), Powerlifting Team, Harvard Caribbean Club
- Coursework: Systems Programming, Computer Networking, Introduction to Electrical Engineering, Probability and Statistics, Data Visualization, Data Structures and Algorithms, Discrete Math, Linear Algebra, Design in Virtual Reality (MIT 2.177)

EXPERIENCE

Spot and Tango   June 2025 - August 2025
Software Engineering Intern   *New York, NY*

- Reduced bugs and tech debt by 5x by writing automated integration tests using Playwright and Bash.
- Boosted customer retention and lifetime value by 18% through a sitewide promotion feature, implementing backend services in Python.
- Increased customer engagement by 15% by building backend logic in Python to support A/B/C testing for SMS campaigns.

Radcliffe Institute for Advanced Study   August 2024 – May 2025
Research Partner to Jessica Vaughn   *Cambridge, MA*

- Designing and 3D printing 5+ sculptural components for an art installation in award-winning artist's upcoming solo exhibition using Blender, Fusion 360
- Engineering airflow control system for a pneumatic sculpture, using C++ and Arduino to implement control logic.
- Creating 3D renderings of gallery spaces to increase productivity in prototyping, using Rhino, Blender

PROJECTS

Emergent Misalignment Replication | *HuggingFace, Colab, Python, LoRA finetuning for LLMs*   May 2025

- Fine-tuned Meta's LLaMA 3.2B Instruct model with LoRA adapters on misaligned datasets to analyze high coherency with low alignment.
- Reproduced findings from *Model Organisms for Emergent Misalignment* paper at smaller scale.
- Developed training/evaluation pipeline in Colab with model I/O, inference, and CSV output.

LiftAssist | *Arduino, 3D Printing, CAD*   May 2025

- Creating sensor-embedded barbell clamps to improve user's lifting form by providing real-time feedback and measurements.
- Programming time-of-flight sensors, accelerometer/gyroscope system for accurate position, angle, and depth tracking using Arduino
- Designing and 3D printing hardware casings using Fusion 360

Acoustic Human Pose Classifier | *PyTorch, Jupyter Notebook, Python*   November 2022

- Processed dataset of 500+ recording samples, preparing training data for a human-pose classification model using acoustic vibrations.
- Applied dimensionality reduction techniques PCA and t-SNE to optimize feature selection
- Trained a neural network with PyTorch in Jupyter Notebook, achieving 84% accuracy in identifying human poses from acoustic data.

TECHNICAL SKILLS

Languages: Python, C, C++, JavaScript, HTML/CSS, SQL, Bash
Libraries/Frameworks: React.js, Flask, Django, PyTorch, Pandas, Scikit-Learn, Qiskit
Platforms/Tools: Linux, Git, Docker, AWS S3, AWS Lambda
Engineering/CAD: Blender, 3D Printing, Autodesk Fusion, Onshape, Solidworks, Arduino