

Ankitha Raman

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EDUCATION

Columbia University

B.S., Computer Science with a concentration in Machine Learning

Dean's MS Academic Excellence Fellowship

Dec 2027 (expected)

New York, NY

Tufts University

B.S., Double major in Computer Science and Biomedical Engineering (GPA: 3.95)

Senior Capstone Project: Distributed Multi-Agent LLM Search Experiences, Microsoft Inc.

Sample Coursework: Machine Learning, Reinforcement Learning, Computer Security, Machine Structure, Computational Biology, Biological Systems, Operating Systems, Engineering Leadership, Entrepreneurship

May 2026

Medford, MA

WORK EXPERIENCE [Work authorization: US Citizen]

Lanai, Palo Alto CA | Machine Learning Intern

May 2026 - Aug 2026

- Built a lightweight multi-class classification model to detect PII in AI prompts
- Cut inference costs by 43% and latency by 15% relative to previous LLM based model

Kyron Learning, Cambridge MA | Software Engineering Intern

Jun 2025 - Aug 2025

- Built MCP integration enabling LLMs to access Kyron APIs, including OAuth workflows
- This project was demoed in partnership with Instructure at the Instructurecon 2025 keynote

Hassoun Lab - ML+Systems Biology, Medford MA | Undergraduate Researcher

July 2024 - Dec 2025

- Developed a contrastive learning model to resolve compound synonyms in the KEGG biological database
- Experimented with chunking strategies and vector embeddings for RAG with FAISS

Stanford University - School of Medicine, Stanford CA | Student Research Intern

Jul 2023 - Aug 2024

- Streamlined data collection workflows across 100+ laparoscopic ventral hernia repair procedures
- Assisted in simulation surgeries, motion sensor testing, biometrics collection, and grant proposal editing

Kaplan Lab - Tissue Engineering, Medford MA | Research Assistant

Feb 2023 - May 2024

- Conducted research on thermoplastic molding of silk and bacterial materials
- Gained experience in cell culture, tissue engineering and 3D printing

Bio-Techne - Advanced Cell Diagnostics, Newark CA | Student Intern

Jun 2021 - Aug 2021

- Performed RNA analysis on 10 human liver tissue samples (5 normal, 5 diseased) using RNAscope™ staining to optimize assay controls and conditions

PROJECTS

- **RL in Pong:** Implemented a reinforcement learning (RL) agent in a simplified Pong environment using Curriculum Learning and Proximal Policy Optimization (PPO)
- **Sentiment to Sound:** Designed a text-to-music pipeline combining sentiment analysis, custom data-structure-driven melody generation, and a neural network trained on classical scores to predict harmony, generating complete playable compositions via music21
- **Flexion:** Designed, programmed, and built a post-surgery recovery device for knee-replacement patients
- **Project D.R.E.W.:** Arduino-based toy to help autistic children identify emotions. Won a \$1,000 Google grant and ranked in the Top-100 T-Mobile Changemaker Challenge list (among 400+ projects)

SKILLS

- **Programming:** Python, C, C++, Java, Go, React, Ruby on Rails, MATLAB
- **ML/Data:** PyTorch, TensorFlow/Keras, Hugging Face Transformers, Stable-Baselines3, scikit-learn, NumPy, FAISS, Amazon SageMaker
- **Infra/Backend:** AWS, Docker, Kubernetes, REST, gRPC, PostgreSQL, Git
- **Dev Tools:** Cursor, Claude Code, GitHub Copilot