

Hanna Jiang

Lexington, MA, 02421

(301) 520-9864 hannahjiang@umass.edu <https://hannahjiangg.github.io> github.com/hannahjiangg

Education

University of Massachusetts, Amherst
Bachelor of Science in Computer Science and Neuroscience

Expected Fall 2024

GPA: 3.94

Awards: Dean's List Honors, \$12,800 Sherwood Delaney Scholarship

Selected Coursework: Machine Learning, Artificial Intelligence, Software Engineering, Database Design, Game Theory, Game Programming, Programming Methodology, System Principles, Algorithms, Data Structures, Probability, Statistics, Multivariable Calculus, Linear Algebra

Technical Skills

Languages: Python, Java, C/C++ , JavaScript, TypeScript, HTML/CSS, SQL, R

Libraries: Pandas, PyTorch, TensorFlow, NumPy, Matplotlib, OpenCV, SciPy, Scikit-Learn

Tools and Frameworks: ReactJS, NodeJS, Flask, Django, Git, Docker, Microsoft Azure, Postman, CSS/HTML, Rest API

Experience

Amazon Web Services

June 2024 – Aug 2024

Software Development Intern

Seattle, WA

- Collaborated with EC2 ELB Orchestration team to design and implement tools to diagnose and resolve throttling.
- Utilizing AWS Cloudwatch, Midway authentication, and Grafana to make diagnostic dashboards.
- Spearheaded package to automate throttle adjustments with AWS Lambda, Amazon API Gateway, AWS Config.

Lab for Advanced Systems Software and Sleep, UMass Amherst

June 2023 – Aug 2023

Software Engineering Intern

Amherst, MA

- Developed a data analytics and visualization web dashboard using Streamlit to help users study their sleep data.
- Organized and analyzed sleep data by using Pandas dataframes and generated charts using Matplotlib and Plotly.
- Managed and organized participant data using REDCap and executed data quality checks using SQL.

Lab for Internet-scale Distributed Systems, UMass Amherst

June 2023 – August 2023

Undergraduate Research Volunteer

Remote

- Spearheaded the development of Instant-NGP, innovatively improving real-time training for Neural Radiance Fields (NeRF) and amplifying the efficiency of novel view synthesis in Ringmaster under Dr. Ramesh Sitaraman.
- Engineered an effective algorithm and compact neural neural network, substantially increasing the training and rendering speed, while successfully implementing a scalable multi-resolution hash encoding method.

Neuro Learning and Performance Lab, UMass Amherst

December 2021 – May 2022

Undergraduate Research Assistant

Amherst, MA

- Developed and implemented machine learning models and Bayesian inference techniques using MATLAB and Python to analyze eye-tracking and multimodal data in a cognitive science lab.
- Conducted comprehensive data preprocessing, statistical analysis, and interpreted complex findings to illuminate cognitive behaviors and decision-making processes.

Leadership

Manning College of Information and Computer Science

February 2024– Present

Teaching Assistant

Amherst, MA

- Collaborated with one professor, four undergraduates, and two graduate students to run the logistics of the undergraduate algorithms and design course
- Led 50-person weekly discussion sections reviewing time complexity, algorithmic paradigms, greedy, divide and conquer, dynamic programming, network flow, NP-completeness.
- Offer one-on-one assistance during weekly office hours and resolve questions and doubt in online question forum.

UMass Machine Learning Club

June 2023 – Present

Marketing Coordinator

Amherst, MA

- Spearheaded revival of club Instagram and email through informative weekly posts to grow membership base by 300%.
- Pioneered inclusion initiatives and project-based learning to meet students at their skill levels and foster community.