

Hanna Jiang

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github.com/hannajiangg

Education

University of Massachusetts, Amherst

Expected Fall 2024

Bachelor of Science in Computer Science and Neuroscience

GPA: 3.93

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

Selected Coursework: Machine Learning, Artificial Intelligence, Computer Graphics, Software Engineering, Programming Methodology, Algorithms, Data Structures, Probability, Statistics, Multivariable Calculus, Linear Algebra

Technical Skills

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

Tools and Frameworks: CSS, Node.js, Next.js, React, Microsoft Azure, Git, Github, Matplotlib, Pandas, NumPy

Experience

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

Build UMass

February 2022 – present

Product Manager

Amherst, MA

- Collaborated with local businesses to guide software engineers to design and create scalable technological projects.
- Utilized Figma, React, and Flask to convert security monitoring system from web application to mobile application.

Manning College of Information and Computer Science

February 2024– present

Teaching Assistant

Amherst, MA

- Lead 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.
- Utilized Figma, React, and Flask to convert security monitoring system from web application to mobile application