NANCY J. CHEN

Education

Tufts University

Sep. 2023 - May 2027

Bachelor of Science in Computer Science and Mathematics, Minor in Computer Engineering

Boston, MA

GPA: 3.71. Dean's List

Relevant Coursework

- Machine Structure and Assembly Language Programming
- Algorithms
- Data Structures

- Introduction to Security
- Reinforcement Learning

Experience

Tufts University StAAR Center

Aug 2024 - Present

Core Subjects Tutor

Boston, MA

- Deliver one-on-one and drop-in tutoring for undergraduate students in computer science and math courses to help them master course concepts and develop independent learning strategies.
- Conduct review sessions and workshops on course content and study strategies, announced via Canvas.

Tufts University School of Engineering

April 2025 - Present

Engineering Ambassador

Boston, MA

- Nominated by faculty members in the CS Department and Center of Stem Diversity to welcome first-years to get excited about Tufts and help facilitate their transition.
- Host school-wide events to guide students through course registration, major selection, and other aspects of college life.

Amazon Advertising

Oct 2021 - Oct 2024

Data Analyst Apprentice

Manhattan, NY

- Updated the Insights Team's internal website using HTML, CSS, and XWiki, collaborating with webpage owners to streamline content and remove outdated pages.
- Created 10+ IMDB audience profiles by leveraging SQL, Excel, and PowerPoint for data retrieval, analysis, and visuals.

Research

Research Experiences for Undergraduates (REU) Program in Data Science

Jun 2024 - Aug 2024

NSF-sponsored REU site, hosted by Tufts University

Boston, MA

- Conducted research on Augmented Reality (AR) with PhD Candidate Brennen Miller-Klugman under the supervision of Professor Jivko Sinapov at the Multimodal Learning, Interaction, and Perception Lab.
- Utilized human-in-the-loop reinforcement learning techniques to identify the most effective AR visualizations for enhancing robot obstacle navigation training, while analyzing the impact of AR on user training strategies.
- Learned how to develop and deploy a Flask web interface for real-time robot control, utilizing Docker for containerization and integrating with ROS to enhance user interaction and accessibility.

Leadership & Awards

Catch It. Recycle It | Runner-Up, Environmental Track, JumboHack 2024 | Java, Java Swing, Trello

- Led the development of an interactive recycling-themed game with a team of five at Tufts University, aimed at raising environmental awareness and promoting sustainability.
- Designed a user-friendly interface, ensuring seamless integration of GUI and sprite components.
- Employed agile methodologies to effectively manage project tasks and enhance the development process.

Pizza-Sticks | 1st Place, Battlebot Competition, Tufts Robotics Club | Onshape, AutoCad

Sep 2023 - May 2024

- Collaborated with a team of four to engineer and construct Pizza-Sticks, a competitive battlebot, using AutoCAD for design and 3D printing for component fabrication.
- Assembled and tested the robot, ensuring optimal performance through iterative design and troubleshooting.

Technical Skills

Languages: Typescript, JavaScript, Python, Java, C, C++, Assembly, Bash, HTML/CSS, SQL, Linux

Other: Next.js, React.js, Bootstrap, NumPy, Pandas, Scikit-Learn, Java Swing, Git, Robot Operating System (ROS)

Dev Tools: VS Code, Docker, Flask, Wireshark, Solidworks, AutoCAD, JetBrains IDEs (i.e. IntelliJ, PyCharm)

Certifications

Machine Learning Foundations e-Certificate by Cornell University (2024) [view] GIAC Foundational Cybersecurity Technologies (GFACT) Certification (2023) [view] Python for Everybody Specialization by University of Michigan (2022) [view]