Maanit Malhan

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EDUCATION

University of Connecticut   Storrs, CT, USA
B.S in Computer Science, Concentration in AI/Computational Data Analytics   *December 2025(Expected)*

- Coursework includes CPU Architecture and Assembly Language, Cybersecurity, Data Structures and Algorithms, Algorithms and Complexity, Systems Programming, Object-Oriented Programming

TECHNICAL SKILLS

Programming Languages: Python, C, C++, Java, HTML/CSS, JavaScript, SQL, Git/Github
Libraries and Tools: ReactJS, Plotly, Pandas, Numpy, PowerShell, Linux/Unix, Power Bi, LaTeX, Matplotlib, Docker, Tmux, markdown, vim, Bash, MongoDB, OpenCV, Linux, Unix
Other: Project management, Agile, Jira, Trello

EXPERIENCE

Department of Energy, Southern New England Industrial Assessment Center
Software Engineer   *September 2023 - Present*

- Developing and deploying a **MERN stack** web application that is a hub for the company with custom internal tools enhancing employee efficiency. Utilized **Docker** for seamless deployment.
- Developed software using **Python** to effortlessly complete **data modeling and data management.** The software automatically manipulates and visualizes data, reducing time for calculations and visualizations by 85%.

LINKs(Laboratory of Intelligent Networked Systems and Robotics) Lab
Undergraduate Researcher   *September 2024 - Present*

- Conducting a comprehensive literature review on ML and AI applications for path planning.
- Studying and **creating new Path planning and navigation systems with ML models**, specifically using deep reinforcement learning Algorithms.

FROST Robotics
Project Manager/Software Engineer   *January 2024 - Present*

- Developing state-of-the-art battle robots that compete in the NHRL, using expertise in electronics, design, and overall functionality implementation using **C and C++**.
- **Leading a team** implementing real-time object detection algorithms using **OpenCV** and integrating sensor data for autonomous decision-making and driving in robot battles.

University of Connecticut FSAE
Data Analyst   *August 2023 - October 2024*

- Worked on and managed projects that conducted **data acquisition and statistical analyses** on vehicle test data. To create actionable items that significantly improved vehicle track times in competition.

PROJECTS

- **Husky Dining**, Leading a year-long Senior Design Project team in designing and implementing a comprehensive web application from the ground up. Actively contributing to coding and development efforts, working on front-end and back-end components using **SQL and JavaScript**. and leading them using project management tools like **Jira**
- **T.A.L.L language-learning**, Created Software that uses **AI** to help students learn languages. Students trace letters or words on a canvas, and the work is checked using AI. It helps students improve vocabulary, letter recognition, and motor skill development.