

# Maanit Malhan

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## EDUCATION

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### 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, Statistics, Object-Oriented Programming I and II, Cybersecurity, Data Structures and Algorithms, Algorithms and Complexity, and Discrete Math

## TECHNICAL SKILLS

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**Programming Languages:** Python, C, C++, Java, HTML/CSS, JavaScript, Bash, Object-Oriented programming

**Libraries and Tools:** ReactJS, Plotly, Pandas, Numpy, OpenCV, YOLOv8, Git/Github, ZSH, PowerShell, Linux/Unix, WordPress, Microsoft Office Suite, Power Bi, LaTeX

## WORK EXPERIENCE

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### FROST Robotics

*Financial Officer/Team member*

*January 2024 - Present*

- Developing a state-of-the-art Full-Body Spinning Combat Robot, gaining expertise in electronics, design, and overall functionality implementation using C and C++.
- Helping fundraise by networking with companies and individuals and allocating funds as required for team projects.

### Department of Energy, Southern New England Industrial Assessment Center

*Software developer/Student assessor*

*September 2023 - Present*

- Used HTML and CSS to create pages on and manage our website, [iac.uconn.edu](http://iac.uconn.edu)
- Invented powerful software using Python to effortlessly retrieve, manipulate, and visualize database data, automating value extraction, document presentation, and calculations.
- Developing a full-stack web application featuring auto-fill functionality, dynamically populating fields based on previously entered data associated with specific codes.

### University of Connecticut FSAE

*Team member(Data acquisition sub-team)*

*August 2023 - Present*

- Prepare, organize, and facilitate track and test days.
- As a UConn FSAE Data Acquisition (DAQ) team member, I set up telemetry sensors using electrical skills and then analyzed and graphed useful recorded data using Python.

### University High School of Science and Engineering

*Teaching Assistant*

*August 2022 - June 2023*

- Instructed a class of 25 students in PLTW Principles of Engineering.
- Taught students the applications of robotics, simple machines, compound machines, circuits, and programming.
- Offered one-on-one and small-group student assistance during class, addressing questions and clarifying concepts.

### FIRST Robotics Team - Team 1991

*Captain and Sub-team Lead*

*August 2019 - June 2023*

- Led a team of 50 Students split between Corporate, Mechanical, Design, Programming and Electrical Sub-teams.
- Programmed all aspects of the robot using Java.

### FIRST Lego League - Team 55523

*Lead Student Mentor*

*August 2022 - May 2023*

- Volunteered to Mentor eight members in programming LEGO robots to complete missions on the competition field, teaching basic coding principles and best practices in programming.

## PROJECTS

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- **T.A.L.L language-learning**, Under development is a demo—ready software that uses AI to help students learn languages. Students trace letters or words on a canvas, and the work is checked using AI. Helps students improve vocabulary, letter recognition, and motor skill development.
- **RoboSight**, Initially developed as a demonstration of vision software. Updated to integrate the vision software with the robot's hardware devices and sensors for real-world scenarios like auto-aim/auto-shooting and object tracking with more accuracy and control than the default software.