Maanit Malhan

EDUCATION

University of Connecticut

Storrs, CT, USA

B.S in Computer Science, Concentration in Computational Data Analytics

December 2025 (Expected)

• Coursework includes CPU Architecture and Assembly Language, Statistics, Object-Oriented Programming I and II, Cybersecurity, Data Structures, and Discrete Math

TECHNICAL SKILLS

Programming Languages: Python, C, C++, Java, HTML/CSS, JavaScript, Bash, Object-Oriented programming **Libraries and Tools:** React, Plotly, Pandas, Numpy, OpenCV, Git/Github, ZSH, PowerShell, Linux/Unix, WordPress, Microsoft Office Suite, Power Bi, LaTeX

Supplementary Skills: Electrical skills(soldering, breadboards, etc), Project Management, Leadership, Public speaking

WORK EXPERIENCE

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
- Invented powerful software using Python to effortlessly retrieve, manipulate, and visualize database data, automating value extraction, document presentation, and calculations.

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 analyzed the recorded data using Python.

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.

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

- 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.