ASTHA VERMA

M.Tech – Robotics & AI

Ph: +91-87802 23547
Email: 25mir028@nirmauni.ac.in
Ahmedabad, Gujarat, India - 38

CARRER OBJECTIVE

To pursue a challenging role as a Robotics Engineer where I can leverage my strong foundation in embedded systems, microcontroller-based development, and AI-integrated robotics to design and implement intelligent real-time robotic systems, perform advanced sensor integration, and develop efficient High-level firmware in C, while bridging hardware and software to deliver reliable, scalable, and high-performance solutions for robotics, automation, and IoT-driven applications in a forward-thinking and innovation-focused organization.

SKILLS

Programming: C/C++, Embedded C, Python, JS, JAVA

Microcontrollers: Arduino, ESP, Raspberry PI

Development Tool: ROS, Arduino IDE, MATLAB/Simulink, CREO,

MERN Stack

AI/ ML/ DL

EDUCATION

Nirma University M.Tech – Robotics & AI | CGPA- 7.95	2025 - Present
Sardar Vallabhbhai Patel Institute Of Technology (GTU) B.E. – Information Technology | CGPA - 7.78	2021-2025
Krishna Science School 12th | GSEB | Percentage: 76.92/ 100	2020-2021
Shree Gujarat Vidyut Board Vidhyalaya 10th | GSEB | Percentage: 75.83/ 100	2017 - 2019

Professional Experience

KnackTech   January 2025 - April 2023
Full stack Development Intern
Key Skills: Full Stack Development , Testing/Debugging , Team-Building

Worked in a structured development environment, following planned workflows and milestone-based delivery. Collaborated with peers to test, debug, and validate system functionality. Improved technical communication and documentation through regular reviews and project reporting in Wipro Certified Company.

Qspiders   July 2024- August 2024
Web Development Intern
Key Skills: Web Development , SDLC, Problem- Solving

Gained exposure to the Software Development Life Cycle (SDLC) and structured project workflows. Collaborated with team members to improve communication, requirement understanding, and feature validation. Strengthened problem-solving, debugging, and technical documentation skills in a fast-paced environment.

Certification

- o   Part of My Equation Robo AI Certification
- o   Universal Robotics e series core track
- o   C-DAC Certified UI/UX Designer
- o   MATLAB Onramp

PROJECTS

Auditorium Service Robot   January 2026 – present

Key Skills: Omni-directional wheel kinematics, Microcontroller-based System, Real time programming, embedded c

Developing an autonomous omni-directional mobile robot with embedded sensor integration, real-time navigation algorithms, and gesture-based control for touchless human–robot interaction.

AI based Stress detecting   August 2025 – December 2025

Key Skills: Embedded c , Sensor Integration, Python, AI Algorithms

Developing a real-time multi-sensor health monitoring system with embedded data acquisition, serial communication, and ML-based stress classification.

Obstacle Avoidance & Path Following Rover   Sept 2025 - Oct 2025

Key Skills: Autonomous navigation, Sensor fusion, Actuation & Control, Embedded Programming

Designed and built an autonomous robot car featuring integrated Obstacle Detection and path-following capabilities. Integrated Single Board Computers with ultrasonic sensors and motor drivers to build a responsive hardware-software interface.

Smart Sequence Pattern Detector   July 2024 – November 2024

Key Skills: C, MATLAB, Pattern Logic

Implemented a sequence pattern detection system using simulated interrupt-based architecture to mimic microcontroller-style real-time processing and control flow.

Face Emotion Recognition   February 2024 – June 2024

Key Skills: Python , Open CV, ML

Developed CNN-based deep learning models to detect human faces and classify emotions such as Happy, Sad, Angry, and Neutral from live video feeds with high accuracy.

Extracurricular Activities

- o Co-Head - National Level Technical Event, Prakarsh'24.
- o Part Of Google Cloud Facilitator Program.
- o Actively participated in competitive team sports events

PERSONAL HOBBIES

- o Problem-solving
- o Analytical thinking
- o Self-driven & Continuous learner
- o Team player

PERSONAL DETAILS

Gender: Female
Date of Birth: 29/09/2004
Phone No: +91 87802 23547
E-mail: astha.verma2909@gmail.com
LinkedIn: https://www.linkedin.com/in/astha-verma-70a37a240/
Portfolio: https://astha-portfolio-murex.vercel.app/
Current Address: A-404, Dharti Saket, Nr. Theater media, New Ranip, Ahmedabad, Gujarat, India - 382470
Permanent Address: 334/1, New GSECL Colony, TPS, Sikka , Jamnagar - 361141