

EDUCATION

Bachelor of Technology Electrical and Electronics	Tula's Institute, Dehradun	2022-2025
Diploma Electronics	State Board of Technical Education Bihar	2020-2022
ITI Electrician	Satya Pvt ITI Bihar	2017-2019

TECHNICAL SKILLS

- PCB & Hardware Design

: Altium Designer, Schematic Capture, PCB Layouting, Multilayer Routing, EMI/EMC Mitigation Power Electronics, Digital Electronics, Analog Circuits.
- Programming & Tools

: C Programming (Intermediate), VS Code, S32 Design Studio, Code Compose Studio,Github.
- Microcontrollers & Interfaces

: Nordic-NRF52840-DK,TI F2800157 LaunchPad, NXP S32K344, STM32 UART, I2C, SPI, QSPI, MODBUS
- Testing & Debugging

: Oscilloscope, Logic Analyzer, Hardware Troubleshooting
- Hardware Prototyping

: SMD Soldering (0402, QFN, BGA), Manual PCB Assembly & Prototyping

EXPERIENCE

- Synchronous Drives & Inverter
Hardware Engineer

Nov 2025 - Present
Surat, Gujrat

• Designed and developed hardware for EV two-wheeler motor controller and drive system, including schematic capture and 6-layer PCB layout using Altium Designer.

• Executed hardware debugging and validation using oscilloscope, logic analyzer, and power analyzers, resolving critical design issues and achieving first-time-right prototype success on 4 consecutive projects.

• Executed hardware debugging, validation, and performance characterization using oscilloscope, logic analyzer, and power analyzers, ensuring first-time-right prototypes across multiple R&D iterations.
- IIT Ropar , TIF Awadh
Hardware Engineer

Jan 2025 - Oct 2025
Ropar , Punjab

• Prototyped and debugged IoT device hardware modules for R&D projects.

• Researched complex technical issues and provided resolutions.

• Conducted manual prototyping and assembly of IoT hardware modules, including hand soldering of SMD components up to 0402 package.

• Managed component inventory and BOM for IoT R&D projects, ensuring smooth supply for prototyping and assembly.
- PROJECT
- EV Two-Wheeler Motor Controller Hardware

• AMONIQ DEVICE [Ammonia detection device]

• GPS DEVICE [An Asset Tracker]

• GATEWAY [A Multirole Data logger]

• SHT45 TEM & HUMIDITY [Build from scratch]

• OPTICAL SOIL SENSOR [Nutrients detection]

• Soil Moisture Monitoring-Based Irrigation System Design
- ACHIEVEMENT & CERTIFICATES
- ACADEMIC EXCELLENCE (2025)

• 1ST RUNNER UP – PROJECT EXHIBITION (TECH FEST "UTKRISHT")

• 2ND PRIZE – ROBOT WAR COMPETITION

• ADVANCED DIPLOMA IN COMPUTER APPLICATION

• ELECTRIC VEHICLE SYSTEMS CERTIFICATION