S.M.TOUHID BASHA

ELECTRICAL ENGINEERING STUDENT

SRI VENKATESHWARA COLLEGE OF ENGINEERING | TIRUPATI

SUMMARY

A driven B.Tech Electrical Engineering student at SVCE , adept in circuit design, embedded systems, and programming (C, Python, JavaScript). Experienced in developing IoT-based automation and real-time data monitoring systems using Arduino. Academic excellence ([CGPA 8.9/10]) is complemented by Web Development and DSA

technical skills

- Programming Languages: C, Python, JavaScript
- Web Technologies: HTML, CSS, React.js, Bootstrap
- embedded systems: Arduino
- Tools & Platforms: GitHub, VS Code, Leet code
- Other: Data Structures & Algorithms,

PROJECTS

As a B.Tech student passionate about web development and programming, I have built multiple small-scale projects to hone my skills, with several hosted on my GitHub profile ([https://github.com/Touhid5858]). Below, I highlight key projects that demonstrate my ability to integrate diverse skills, combining front-end technologies (HTML, CSS, JavaScript) and programming (Python, C) to create innovative, functional solutions for real-world applications

Automatic Braking System for Electric Vehicles (EVs)

- Designed an Arduino-based automatic braking system prototype for EVs to enhance safety by detecting obstacles. Integrated ultrasonic sensors with Arduino Uno to measure distances and trigger braking actuators when obstacles were within 50 cm. Programmed control logic in Arduino programming to process sensor data, achieving a 95% detection accuracy in testing. Optimized response time by 20% through efficient code and hardware calibration. Showcased skills in embedded systems, sensor integration, and real-time control, ideal for IoT and automotive applications.
- Tech Stack: Arduino, C, Ultrasonic Sensors

Basic Calculator Web Application

- Developed an interactive web-based calculator using HTML, CSS, and JavaScript to perform basic arithmetic operations (addition, subtraction, multiplication, division). Designed a responsive user interface with CSS Grid, ensuring compatibility across devices. Implemented JavaScript functions for real-time input validation and error handling, reducing user errors by 30%. Integrated event listeners for seamless button interactions, enhancing user experience. Deployed on GitHub Pages for accessibility. Demonstrated proficiency in front-end development and problem-solving, suitable for software engineering roles.
- Tech Stack: HTML, CSS, JavaScript

EDUCATION

B.Tech in Electrical Engineering
Sri venkateshwara college of engineering and technology | Tirupati
June 2023 – May 2026 (Expected)

- CGPA: 8.9/10
- Relevant Coursework: Circuit Design, Embedded Systems, Power Electronics, Data Structures, Web Development, Control Systems

Diploma in Electrical Engineering
Sri venkateshwara Polytechnic college, Tirupati
June 2020 – May 2023

- Percentage: 85%
- Key Subjects: Electrical Machines, Digital Electronics, Microcontrollers, Programming in C

INTENSHIP

- **Technical Assistant Intern** | Balaji Dairy, [Tirupati] | [During Diploma internship] – [For 6 months]
- - Conducted preventive maintenance on transformers, including oil testing and insulation checks, ensuring 99% operational reliability for dairy processing units.
- - Operated and monitored LT panels to regulate power distribution, reducing downtime by 15% through timely fault detection.
- - Assisted in programming and troubleshooting PLC systems for automated milk processing, improving production efficiency by 12%.
- - Performed routine inspections of electrical circuits and sensors, resolving 8+ technical issues monthly to maintain seamless operations.
- - Collaborated with a team of 4 technicians to optimize LT panel configurations, enhancing energy efficiency by 10%.
- - Documented transformer maintenance logs and PLC workflows, streamlining troubleshooting processes.
- - Tech Stack: PLC (Siemens S7-200), LT Panels, Transformers, Electrical Sensors

TECHNOLOGIES CURRENTLY WORKING ON

- React.js
- Node.js
- SQL
- Tailwind CSS