Satrudhan Chauhan

schauhan3436@gmail.com 8603630339 Birgunj, Nepal Linkedin

Profile

Enthusiastic electrical and computer engineering specialist skilled in circuit design, PCB designing, Python, C++, and Arduino programming, with basic knowledge of VLSI. Showcasing adaptability and leadership through hands-on projects. Committed to innovative electronic system design.

Education

Bachelor of Technology in Electrical and Computer Engineering 2021 – present | Kollam, India
Amrita Vishwa Vidyapeetham, Amrithapuri
Current CGPA: 8.24

10+2 (PCM) 2019 – 2020 | Birgunj, Nepal
Alpine Higher Secondary School, Nepal
Percentage: 91%

Secondary Education Examination, Grade-10 2017 – 2018 | Birgunj, Nepal
Maisthan Vidyapith Ma. Vi. Birgunj
Percentage: 91.25%

Skills

Soft Skills: Strong problem-solving | Analytical skills | Communication | Leadership | Critical thinking | Attention to detail

Technical Skills: Analog/Digital/Power/Micro Electronics | Circuit designing | PCB designing | KiCAD/ Altium /Autocad | Verilog | Embedded System design | VLSI basics | C++ | Python | Arduino /NodeMCU /Raspberry Pi | ARM micro controllers | Troubleshoot and repair hardware issues | Hardware Engineer

Projects

Auto Misalignment Correction System for the Transmitter Coil in Wireless Electric Vehicle Charging to Achieve Maximum Power Transfer 05-2024 – present
- Addressed longitudinal, lateral, and vertical alignment issues to optimize power transfer and efficiency.
- Implemented real-time detection and correction mechanisms for seamless coil alignment.

Hexapod Robot [Gujarat Council on Science and Technology] 06-2024 – 11-2024
- Needed a robot capable of navigating complex terrains, including climbing obstacles, for explorations.
- created and designed a six-legged robot that can walk in all directions having stable locomotion control.

18 Channel Servo controller PCB design 10-2024 – 10-2024
- Designed a servo controller for a hexapod robot that can operate 18 servos using a PIC24FJ64GA004 microprocessor.

Brainwave-Controlled Drone Using EEG Technology
01-2024 – 09-2024

- Encountered challenges in developing a drone with autonomous flight and brain control.
- Implemented a brain-controlled interface to enable direct user control of the drone's operations.

Traffic Light Controller Using Verilog
06-2023 – 10-2023

- Needed a reliable traffic light control system for a country road intersecting a main highway.
- Designed and implemented a Traffic Light Controller using Vivado for efficient traffic management.

GSM Based Home Automation
03-2023 – 05-2023

- Developed GSM-based system enabling remote control via mobile devices.
- Enhanced accessibility with seamless device management from anywhere using smartphones.

Buck converter PCB design

- Designed a buck converter PCB to step down voltage from 12V to 5V, ensuring stable power delivery for electronic circuits.

STM32F Microcontroller PCB design

- Created a custom PCB for STM32 IC, ensuring efficient component placement and power distribution for embedded system.

Design of Boost Converter circuit

Positions Of Responsibility

Robotics Club
2021 – present

Hardware Maestro

- Acquired skills through workshops and competitions by mastering hardware repair and optimization.
- Contributed to innovative robotics projects in the college's premier robotics club.

Participated in the Robotics Competition organized by GUJCOST through our college's Robotics Club.

Career Guidance Event for Children in an Orphanage as an SSR project.
09-2023

Team Lead

- Organized a 2-day career guidance event, benefiting children in an orphanage.
- Managed event logistics and participant engagement, ensuring a successful outcome.