Prashant Bhandari

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/prashantbdri

SUMMARY

Electronics Engineering student with hands-on experience in Robotics, PCB designs, and Embedded systems. Proven track record in leading projects, mentoring teams, and delivering competition-winning designs.

TECHNICAL SKILLS

- PCB Design: KiCad, Proteus
- Embedded Systems: Arduino, ESP32, ECU2000, Helios SDK, HCM111Z
- Programming Languages: C, C++, Python, JavaScript, Micro Python
- UI Development: LVGL Graphics Library
- Machine Learning: Linear Regression, Classification

EDUCATION

B.E. Electronics, Communication &Information Engineering
Pashchimanchal Campus, Pokhara (Jan 2023 to Present) , 3rd year currently
XII , Science Stream (NEB)
Motherland Secondary School | 2023

EXPERIENCE

Executive Member - Robotics Club, Pashchimanchal Campus | (March 2025 – Present)

- Lead cross-functional project teams and coordinate club technical activities.
- Mentor 50+ members in microcontroller programming and PCB design.

Electronics Engineer Intern - Yarsa Tech, Pokhara | (Jan 2025 – July 2025)

- Designed and optimized buck converter circuits, reducing output fluctuations
- Developed automated QC testing framework for power backup device, improving quality assurance
- Designed and programmed BLE-enabled QR/barcode scanner systems
- Implemented embedded solutions using Helios SDK, MicroPython, and C for commercial products
- Developed user interfaces with LVGL graphics library for embedded display systems

General Member - Robotics Club Pashchimanchal Campus | (March 2024 – March 2025)

- Developed award-winning Micromouse robot using line maze-solving algorithms
- Coordinated 15-day "Rainy Session" workshop, training 100+ students in robotics
- Mentored teams for Autonomous Boat Racing Competition, achieving 1st Runner-up position

PROJECTS

Micromouse | Line Maze-Solving Robot

- Designed and programmed a maze-solving robot using Arduino Nano, QTR sensors, and PID control, achieving 95% navigation accuracy. Reduced PCB size by 40%, boosting speed & reliability.

Voyager | Line Follower Bot

- Built line-follower robot with ultrasonic obstacle detection; optimized for speed and stability.

Autonomous Boat Project

- Designed and raced an autonomous boat; the team won 1st Runner-Up in competition.

ACHIEVEMENTS

- 1st | LOCUS 2025 (Micromouse) - Jan 2025
- 2nd | Delta 5.0 (Micromouse) - Feb 2025
- 5th | Techfest, IIT Bombay (Micromouse) - Dec 2024
- 1st Runner-Up | Autonomous Boat Racing Competition - Oct 2024
- 1st | Voyager, A line Follower Bot - June 2023

VOLUNTEER

Robotics Mentor | Karyashala & Engineer Without Borders (July 2024, 7 days)
Guided 50+ students through 3D design, 3D printing, and ESP32-based projects.

COURSES

- Python Programming: A Concise Introduction - Wesleyan University
- Supervised Machine Learning: Regression and Classification - Stanford Online