Gobinda Prasad Paudel

gobinda-prasad-paudel | gobinda-prasad-paudel | gobindapoudel.com.np | gobindapaudelofficia

SUMMARY

Software, IoT, and electronics (hardware and AI), mobile phone repair, full-stack web development, and real-world problem solving. Seeking opportunities to develop real-world projects focused on networking (connectivity), automation (electronics and AI), and societal impact.

PROJECTS

Voltanex   2024 – Present

– An e-club for electronics, computer science, and AI enthusiasts.
– Founded and developed multiple embedded system projects under the club.
– Focused on hands-on learning, leadership development, and collaborative innovation.
– **Skills**: Arduino, Raspberry Pi, Leadership, Soft Skills
– **Website**: voltanex.gobindapoudel.com.np

Off-Grid Communication System   2025

– Designed an off-grid communication system to enable connectivity in remote areas, especially during natural disasters such as floods, earthquakes, and GLOFs when conventional GSM networks are unavailable.
– Provides walkie-talkie–like communication using affordable and rapidly deployable hardware for local communities.
– Planned future capability to enable offline mobile-to-mobile messaging using LoRa modules connected via USB as transmitters.
– **Skills**: ESP32, LoRa, Arduino, Python, Node.js, MQTT
– **GitHub**: Repository

Public Transportation Management System (PTMS)   2024

– IoT-based public transportation automation and monitoring system.
– Developed two applications: a web application for customers and a web-based admin panel (partial implementation due to time constraints).
– **Key Features**:
  – Emergency SOS alerts sent by drivers to the admin panel.
  – Real-time display of available seats and safety ratings for buses.
  – Estimated arrival time at specific bus stops.
  – Easy reporting of complaints, lost-and-found items, and emergency incidents.
  – Transport card management, including detaching lost cards and topping up via QR-based gift cards.
– **Skills**: Node.js, ESP32, Next.js
– **GitHub**: Repository

EduCare 2025

– A rapid medical emergency response system designed specifically for students.
– Student ID cards contain QR codes with minimal data and a unique identifier.
– Full medical history is accessible only by authorized hospital systems, ensuring data privacy and security.
– Limited and OTP-verified access for pharmacies and medical personnel.
– Designed for future handover to government authorities due to sensitive data handling.
– **Skills**: Python, React, FastAPI, MongoDB, Node.js, Express.js, Tailwind CSS
– **GitHub**: [Repository]

Expense Tracker 2025

– Initially developed for personal use and later open-sourced for public use.
– Supports tracking of expenses, income, gifts, discounts on expenses, and financial statement generation.
– Features user authentication, analytics dashboard, PDF export, and full CRUD operations.
– Includes support for the Bikram Sambat date system.
– **Tech Stack**: Express.js REST API, MongoDB with Mongoose ODM
– **GitHub**: [Repository]

Thrive – Gender Equality Platform 2025

– Hackathon project promoting gender equality through empowerment, reporting, and awareness.
– Implemented an innovative top-up system using 16-digit codes.
– Full code redeems the complete amount, while partial 8-digit continuous codes redeem half the value, allowing later reuse.
– Recognized by judges for innovation and social impact.
– **Skills**: React, Node.js, MongoDB, Express.js, Chart.js
– **GitHub**: [Repository]

SKILLS

Technical Skills	React, TypeScript, Tailwind CSS, Node.js, Express.js, Vite
Embedded Systems	ESP32, Arduino, Raspberry Pi, IoT
Other Skills	Mobile Repair, AI/ML Basics

CERTIFICATIONS

The Open University	10-hour course, 2025
An Introduction to Electronics	
Udemy	17-hour course, 2022
Complete JavaScript & jQuery Course with Bonus Vue.js Introduction	
Udemy	4-hour course, 2021
HTML & CSS: Certification Course for Beginners	
Udemy	1-hour course, 2021
Photoshop for Beginners	