DARSHAN C

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Career objective

Passionate Embedded and IoT Engineer specializing in ESP32-based systems, PCB design and Flutter app integration. Seeking an internship to apply my technical and problem-solving skills in emerging fields like smart automation, drone electronics and automotive embedded systems.

Education

- B. E (EEE) | Vidya Vikas Institute of Engineering and Technology | 2022 – Present | 7.21 CGPA
- PUC (PCMB) | Sadvidya COMP PU College | 2021 – 2022 | 48.5%
- S.S.L.C | Sadvidya English Medium High School | 2019 – 2020 | 70.4%

Technical Skills

- Programming: C, C++, Python, MATLAB, Kotlin, Assembly
- App & Game Development: Flutter, Android, Unity, Unreal Engine
- Embedded Systems: ESP32, ESP8266, Arduino UNO, Sensors, Relays, Actuators, Servos, TFT/OLED Displays
- Embedded Software & Simulation Tools: Arduino IDE, Keil µVision5, PlatformIO, NI Multisim, Tinkercad
- Design & CAD: Solid Edge, Altium Designer, Blender, Mechanical CAD
- Networking & Protocols: Wi-Fi (AP/STA), Bluetooth, UART, I²C, SPI, UDP, TCP, HTTP
- Power Electronics & Hardware: Power Supplies, BMS, Motor Drivers, Converters, Inverters
- Software & OS: Visual Studio Code, Microsoft Office, Windows 10/11
- Core Competencies: OOP, Project Management, Team Collaboration, Problem Solving, Hardware Troubleshooting

Projects

- Title: InvisiLock: App Controlled Smart Door Lock System for Home and Office Security
  Project Description: Designed and developed an ESP32-based smart door lock system fully controlled via a Flutter mobile app, featuring Wi-Fi connectivity multi-layer security with emergency override and backup power.
  Role: Embedded & App Developer
- Title: Smart Solar Electric Fence System
  Project Description: Built a microcontroller-based adaptive electric fence that automatically adjusts voltage intensity based on intrusion frequency. Designed safety logic to prevent severe injury while maintaining effective perimeter security, integrated solar power backup and developed a Flutter mobile app to monitor intrusion logs and control system settings.
  Role: Hardware, Firmware Developer & App Developer
- Title: Dhivya Kavach: Women Safety Jacket
  Project Description: Developed a wearable safety device integrating motion detection, GSM, GPS and taser modules for real-time alerting and self-defence. Configured automated message and location trigger to emergency contacts and authorities
  Role: Embedded Systems Engineer
- Title: MediWatch: Real Time Patient Health Data and IV Drip Monitoring, Controlling Device
  Project Description: Engineered an IoT-enabled health monitoring system using ESP32 and MAX30100 sensors for BPM, SpO2, temperature, humidity tracking and drip alert, control. Designed real- time Wi-Fi data transfer to a Flutter app with alerts for critical readings
  Role: IoT, Hardware Developer & App Developer
- Title: Low-Cost Digital Smart Lock
  Project Description: Created a cost-effective smart lock prototype using ESP8266 with password, PIN and fingerprint verification through app itself. Developed a companion Flutter app with basic control and configuration

features, enabling remote lock operation, notification, and system status monitoring. Integrated buzzer feedback and dual power operation for uninterrupted security.
Role: Embedded Systems Developer & App Developer

Certifications

- Vidya Vikas Institute of Engineering and Technology | NEWENTURE 2025 - Idea Pitch Contest | 2025
- Vidya Vikas Institute of Engineering and Technology | INNOVVIET 2025 – Hackathon | 2025
- Vidya Vikas Institute of Engineering and Technology | UPCITI 2025 - Workshop on Power Electronics Drives and Electric Vehicles | 2025
- Vidya Vikas Institute of Engineering and Technology | AVEEESHKAR 2025 - State Level Project Competition | 2025
- Vidya Vikas Institute of Engineering and Technology | V-VISION 2025 - National Level Project Expo | 2025
- Vidyavardhaka College of Engineering | VRIDDHEEE 2025 - State Level Project Competition | 2025

Languages

• Kannada – Native • Hindi – Fluent • English – Fluent

Positions of Responsibility

• Team Leader in Presentation and technical projects • Volunteer in college-level events and workshops

Hobbies & Interests

- Technical: Electronics Prototyping, App Development, Game Development
- Creative: Poster & Banner Design, Logo Design, Photo & Video Editing, Cinematography
- Recreational: Video Games, Movies, Music, Travelling, Sports