Gandla Bhargavi
Bengaluru, Karnataka - 560087 | +91-868-293-6681 | barau.avril@gmail.com
LinkedIn | GitHub

Professional Summary

Senior Software Engineer with 4 years of experience in battery management systems (BMS) and telematics in the automotive domain. Expertise in embedded software development, STM32 microcontrollers, and system integration. Contributed 2.5 years on BMS, enhancing firmware reliability, real-time monitoring, and system performance. With 1.6 years in telematics, developed safety features, implemented GTest for validation, and mentored junior engineers, improving team efficiency by 20%. Actively seeking opportunities for professional growth and to contribute to innovative projects that drive organizational success.

Key Skills

- **Programming**: Embedded C, C, C++, Python (Beginner)
- **Tools**: Keil, Eclipse, Visual Studio Code, Code::Blocks, GitLab, JIRA, GitHub, Sublime Text
- **Protocols**: CAN, SPI, I2C
- **Others**: CAN Protocol Message Verification (BUS Master), Virtual Machine (Linux), Draw.io

---

Professional Experience

Senior Software Engineer
Tata Elxsi | Bengaluru, India
May 2023 – Present

- Developed telematics features such as overspeed, low battery, and refuel alerts, improving diagnostics and user safety.
- Conducted feasibility analysis for AWS IoT FleetWise and geofence module implementation, ensuring seamless integration with telematics systems.
- Supported the V2X team by implementing GTest for GNSS model validation, reducing testing time by 15%, and improving test coverage.
- Designed and documented component diagrams using Draw.io, enhancing team communication and system clarity.
- Mentored junior developers, resulting in a 20% improvement in team efficiency and software quality.

Firmware Engineer
Green Cubes Technology | Bengaluru, India
Oct 2018 – Mar 2021

- Implemented bootloader and memory mapping for STM32 microcontrollers, increasing firmware reliability by 30%.
- Conducted comprehensive CAN protocol testing and developed safety latch test cases, ensuring compliance with standards and reducing error rates by 25%.
- Enhanced BMS functionalities, leading to a 25% improvement in system performance.
- Streamlined test case documentation, reducing development time by 15%.
- Optimized battery lifespan by 20% through real-time monitoring and cell balancing in battery systems.
- Resolved critical bugs using JIRA, enhancing software stability and performance.

Education

MTech in Automotive Electronics
VIT University | Vellore

- GPA: 8.12
- Final Year Project: Facial recognition using CNN

Bachelor of Engineering in Electrical and Electronics Engineering
S.C.S.V.M.V Deemed University | Kanchipuram

- GPA: 8.56
- Final Year Project: Z-source inverter

Certifications & Courses

- **Embedded Systems and Automotive Domain** – Skillfinity
- **C Programming Course** – log2base2
- **Python Programming Course** – log2base2
- **C Beginners Programming** – Great Learning Academy
- **Jupyter Notebook** – Great Learning Academy
- **Embedded Systems with Mbed** – Udemy
- **Getting Started with GitHub Copilot** – Great Learning Academy
- **ChatGPT for Coders** – Great Learning Academy
- **Data Structures in C** – Great Learning Academy

References

- **Sunil G**: Staff Engineer, Qualcomm | itsrajsunil@gmail.com | +91-9705946573
- **Raghuraman Devanur**: Senior Engineer, EFALKE - IIIT | raghuramdc@gmail.com