

Nilesh Sapkale

EMBEDDED SOFTWARE DEVELOPER

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SUMMARY

I am currently working as an Embedded Software Engineer at Vmukti Solutions Pvt. Ltd., with over 1 year of experience. I started as an intern in the embedded domain and was later promoted to a full-time role based on my performance. Previously, I worked as a Project Engineer at Teleysia Networks Pvt. Ltd. for over two years in the field of Industrial Automation, where I focused on PLC programming and SCADA system design.

TECHNICAL SKILLS

C programming	Cross-Compilation	Networking Protocol:
Linux Shell Script	MQTT	HTTP, TCP, UDP and FTP.
Wireshark		

PROFESSIONAL EXPERIENCE

Vmukti Solutions Pvt. Ltd	
Embedded Software Developer	June 2024 - Present
Intern – Embedded Software Developer	Dec 2023 - June 2024
<ul style="list-style-type: none">▪ Writing C programs for embedded camera systems▪ Using cross-compilation for ARM & MIPS-based targets▪ Working with SSH, Telnet, MQTT, and HTTP protocols▪ Debugging and testing on Linux systems	
Teleysia Networks Pvt. Ltd.	
Project Engineer	July 2021 - Dec 2023
<ul style="list-style-type: none">▪ Worked on industrial automation systems▪ Developed PLC logic and designed SCADA interfaces▪ Supported control panel design and plant automation	

EDUCATION

Embedded Software Developer Course – Emertxe, Bangalore	March 2023 - Oct 2023
B.E. in Electrical Engineering	June 2017 - Aug 2020
North Maharashtra University, Jalgaon	
CGPA: 7.15	
Diploma in Electrical Engineering	Aug 2014 - June 2017
North Maharashtra University, Jalgaon	
CGPA: 7.15	

HIGHLIGHTS & ACHIEVEMENTS

- Promoted from intern to full-time developer in 6 months.
- Independently delivered 4 major embedded projects.
- Efficiently debugged and optimized embedded C code for real-time applications.

PROJECTS

Camera Config Client

- Developed C program to configure camera parameters (BPS, FPS, resolution) via HTTP API.
- Integrated MQTT for sending/receiving config commands.
- Used cross-compilation and CMake for ARM deployment.

Reverse Proxy Camera Streaming

- Created a lightweight socket-based C program to stream video over P2P.
- Performed cross-compilation for ARM-based hardware.

QR Scanner

- Built QR code scanner using ZBar library to extract Wi-Fi credentials and auto-connect camera.

Two-Way Audio Talkback

- Developed a real-time two-way audio system using MQTT and WebSocket.
- Played audio packets using embedded audio driver integration.