

# Amogh R Naik

Bengaluru | +91 8971904799 | [amoghnaik321@gmail.com](mailto:amoghnaik321@gmail.com)

---

**Embedded Software Engineer** with Around **1.8 years of experience** in embedded software development. Proficient in Embedded-C, C++ programming, STM32 Cortex-M microcontrollers, and ARM Cortex M7 architecture, with hands-on expertise in serial communication protocols including I2C, SPI, UART, and CAN. Skilled in PCB design, CAD 3D design, and end-to-end product development from concept to final prototype. Actively enhancing professional skills by pursuing **Advanced Certification in EV Design from IIT Roorkee**. Known for quick learning capabilities and committed to continuously improving technical expertise to drive innovation and organizational growth.

## WORK EXPERIENCE/HIGHLIGHTS

### R&D Embedded Engineer

April 2024 – CURRENT

Yuvipep - Telaverge Communications India Pvt. Ltd, Bangalore

- Developed firmware modules in Embedded-C, C++, and Python for STM32 and other microcontrollers
- Designed and Developed 5+ PCBs for custom development boards used in educational labs.
- Handled end-to-end product development, including CAD 3D design from concept to final prototype
- Developed and tested bootloader implementations using I2C, UART, and SPI
- Worked extensively with Software Configuration Management (SCM) processes:
  - Waterfall, V-Model, Agile methodologies
  - SCRUM framework
  - Change & version control
  - Reviews & audits
- Contributed to HMI development and testing for embedded systems
- Worked with hardware protocols: UART, SPI, I2C, RS232
- Worked with communication protocols: LIN, CAN, Ethernet
- Developed and tested IoT applications
- Basic understanding of MIL, SIL, PIL, and HIL testing methodologies

## TRAINING/INTERNSHIPS

### Research intern - Offline

February - April 2024

Hindustan Aeronautics Limited, Bangalore

- Technical documentation
- Worked with FPGA Boards (EDGE Spartan 6 FPGA Development Board)
- Worked on a Mini project ( Electronic Voting Machine EVM)
- Gained knowledge on flight control mechanisms and testing processes
- Understanding of Radar and Communication systems in the Tejas Fighter Jet

## TECHNICAL SKILLS

---

<b>Programming Languages:</b>	C, C++, Python
<b>Hardware:</b>	STM32 Cortex M4/M3 based boards, Knowledge of ARM Cortex-M4 architecture, STM32, Arduino UNO(ATmega328)
<b>Development Environment:</b>	STM32CUBE IDE, Keil uVision IDE, Arduino IDE,
<b>Protocols:</b>	I2C, SPI, UART, LIN, CAN, Ethernet
<b>Version Control:</b>	Git, GitHub
<b>Debuggers:</b>	GDB, Oscilloscope, Logic Analyzer
<b>Tools:</b>	MATLAB/Simulink, Kicad, Autodesk Fusion 360, JIRA, Confluence, Android Studio
<b>Compilers:</b>	GCC
<b>Architecture:</b>	AUTOSAR
<b>Firmware &amp; Drivers:</b>	Firmware Development, Device Drivers, Real-Time Embedded Systems Low-level driver development (UART, I2C)
<b>Operating System:</b>	Windows, Linux, RTOS (FreeRTOS )

## ACADEMIC DETAILS

---

<b>IIT Roorkee</b> Advanced Certificate Program in Electric Vehicle Design	<b>JAN - 2025 (Pursuing)</b>
<b>New Horizon College of Engineering</b> B.E in Electronics and Communication Engineering	<b>2021 - 2024</b>
<b>East West College of Polytechnic</b> Diploma in Electronics and Communication	<b>2018 - 2021</b>
<b>Ujjval Vidyalaya</b> SSLC	<b>2018</b>