

# CHANDAN YADAV

chandan4655429@gmail.com • [www.linkedin.com/in/chandanmyadav](https://www.linkedin.com/in/chandanmyadav) • [github.com/Chandanmohanyadav](https://github.com/Chandanmohanyadav)  
• 7773948142

## SUMMARY

Embedded Software Engineer working at CDAC Bangalore, specializing in High Performance Computing (HPC) systems. Having experience in developing and optimizing embedded systems for high-performance environments. Attempting to leverage expertise in embedded software design, system architecture, and real-time computing to contribute to cutting-edge projects in a dynamic organization.

## TECHNICAL SKILLS

**Skills:** ARM Micro-controller Programming, Real-Time Operating Systems (FreeRTOS), Communication protocols (I2C, UART, SPI, CAN, PCIe), IoT, Linux Device Driver, Debugging & Testing, Data Structure.

**Design and Modeling Tools:** STM32CubeIDE, Arduino IDE, VS Code, OrCAD X Capture, Proteus, MATLAB.

**Boards:** STM32F4, ESP32, Beaglebone Black, Arduino.

**Programming:** Embedded C, C++, Python, Shell scripting, Makefile.

## PROFESSIONAL EXPERIENCE

**Centre For Development of Advanced Computing (CDAC), Bangalore: Project Associate** June 2024 – Present

- **Firmware:** Working on firmware for Booting, communication and Fan control of server and management between several server components with BMC Controller (OpenBMC).
- **Server Hardware Integration:** Working on BMC controllers, CPU, FAN Board, Power Distribution board, PCIe Switches, and DC-SCM card integration.

**Tata Motors, Pune: Apprentice Trainee**

Aug 2022 – Aug 2023

- **Engine Test Bed Operations:** Operation and maintenance of engine test beds, contributing to testing and validation of engine performance, durability, and compliance with safety standards.
- **Monorail System Maintenance:** Gained hands-on experience in the maintenance and troubleshooting of monorail systems, ensuring reliable and safe operation through regular inspections and repairs.
- **Level 4 Machine Safety Development:** Contributed to the development and implementation of Level 4 machinery safety protocols, focusing on ensuring the highest standards of operational safety, minimizing risks, and complying with industry regulations.

## EDUCATION

**PG Diploma in Embedded System Design**

Graduated Feb 2024

Centre for Development of Advanced Computing  
CDAC ACTS, PUNE

83%

**B.E. Electrical Engineering (Electronics & Power)**

Graduated May 2022

Gondwana University Gadchiroli  
Government College Of Engineering Chandrapur

82%

## PROJECTS

**Build Linux Bootloader for RISC-V Architecture**

Aug 2023-Feb 2024

**Platform:** Embedded Linux Development

**Description:** Developed Linux bootloader like U-boot, EDK-2 for the RISC-V architecture using a QEMU emulator and virtualizer, enabling the successful booting of the Linux kernel on systems based on RISC-V (SiFive boards). Implemented hardware initialization, memory setup, and kernel loading, while ensuring compatibility with the RISC-V instruction set and Linux kernel requirements.

**GitHub:** <https://github.com/Chandanmohanyadav/Linux-Bootloaders-using-QEMU-for-RISCV.git>

## **Genetic Algorithm Based Health Index Determination Of Distribution Transformer**

Aug 2021-May 2022

### **Platform: ARDUINO IDE SOFTWARE**

**Description:** Genetic Algorithm Based Health Index Determination Of Distribution transformer so that preventive steps can be taken timely to increase the lifespan of transformer. The genetic algorithm is a powerful optimization technique & this way of HI calculation for a transformer leads to a more accurate and dynamic HI calculation.

**GitHub:** <https://github.com/Chandanmohanyadav/Genetic-Algorithm-Based-Health-Index-Determination-Of-Distribution-Transformer.git>

### **CERTIFICATES**

---

[ OrCAD X Capture ] [ Cadence ] [ March 2025 ]