

CHANDAN YADAV

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• 7773948142

SUMMARY

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

PROFESSIONAL EXPERIENCE

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

- **Firmware:** Working on firmware for booting, communication, 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 the 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 safety protocols for machinery, 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%

ACADEMIC PROJECTS

Build Linux Bootloader for RISC-V Architecture

6 Months

Platform: Embedded Linux Development

Description: Developed Linux bootloader like U-boot, EDK-2 for RISC-V architecture using QEMU emulator and virtualizer, enabling the successful booting of the Linux kernel on RISC-V-based systems (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

6 Months

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. 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>

TECHNICAL SKILLS

Skills: ARM Cortex-M Microcontroller, 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, Boards (STM32, ESP32, Beaglebone Black)

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

EXTRA CURRICULAR ACTIVITIES

- Anchoring at College Fest
- Poster-Making
- Head Coordinator of Badminton