ADITYA V. KUMBHAR

Pune, State-Maharashtra | aditya.kumbhar8100@gmail.com | 7020326814 |

CAREER OBJECTIVE

"Embedded Engineer with 1 year of hands-on experience in R&D, skilled in microcontroller programming, embedded systems, and hardware/software integration. Looking to contribute my technical skills and problem-solving abilities to deliver innovative embedded solutions."

EDUCATION

B.E(EE) | SPVP’s S.B.Patil College of Engineering, Indapur | 64.33% (2014-2018)

12th | Jijamata Shikshan Prasarak Mandal, Sarati | 59.08% (2012-2014)

10th | Sadashivrao Mane Vidyalaya, Akluj | 74.91% (2012)

EXPERIENCE:

R&D EMBEDDED FIRMWARE DEVELOPER & TESTER

**TATSUNO India Pvt.Ltd**  03/2024 – Present \* SPI Protocol Implementation: Developed firmware for 7755-display and 5-digit display interfaced with a 4x4 keypad, reducing response time by 15%.

\* CAN Communication: Integrated CAN communication between peripheral devices with CAN filtering, improving data transmission efficiency by 25%.

\* Test Jig Development: Designed and developed test firmware for production components, reducing testing time by 30% and improving quality control accuracy.

\* Firmware Debugging & Optimization: Debugged and optimized embedded software for microcontrollers and DSPs, resulting in a 20% increase in processing speed and stability.

\* Communication Protocols: Developed and tested software for SPI, UART (RS485, RS232), and CAN protocols across embedded devices, increasing system reliability by 10%.

\* 32-bit Microcontroller Development: Released software for multiple product families utilizing 32-bit microcontrollers.

\* Security Features: Implemented secure key encryption using AES and PKI certificates to enhance data security

Electrical Technician at Tata Consultancy Services , Pune - Sumeet Facility Pvt Ltd (Oct 2021–March 2024) Electrical Engineering

Installation maintenance and repairing of electrical control wiring and lighting system

General Electrical Maintenance – PPM, Breakdown and corrective Maintenance Electrical and fire Safety

Troubleshooting of electrical equipment using proper testing devices. Corrective maintenance of different circuit breakers Opera ng and supervision of HVAC system.

Building Management System

Landscape Ligh ng

Electrical Technician at Mphasis, Eon IT Park ,Pune - AMPS Facility Management Pvt Ltd (Nov 2021-Aug 2022)

Electrical Engineering

Installation maintenance and repairing of electrical control wiring and lighting system

General Electrical Maintenance – PPM, Breakdown and corrective Maintenance Electrical and fire Safety

Troubleshooting of electrical equipment using proper testing devices Correcve maintenance of different circuit breakers Opera ng and supervision of HVAC system.

Building Management System

Landscape Ligh ng

Technical Supervisor at Panchsheel Realty , Pune - Logicon Facility Management Pvt Ltd (Feb 2019-Feb 2020)

Electrical Engineering

Installation maintenance and repairing of electrical control wiring and lighting system

General Electrical Maintenance – PPM, Breakdown and corrective Maintenance

Electrical and fire Safety

Troubleshooting of electrical equipment using proper testing devices

Corrective maintenance of different circuit breakers

Building Management System

Property Management Team

Management

Landscape Lighting

**SKILLS**

**• Languages: C, Embedded C, Python.**

**• Understanding of circuit design, schematics, and PCB layouts.**

**• Proficiency with hardware debugging tools like oscilloscopes and logic analysers.**

**• Tools: STM32 G, F Series MCU, Renesas RA4M3, RA6M5MCU, MATLAB-simulation, Power system control, Electrical wiring, Simul ide.**

**• Software tools: Arduino IDE, STM32 Cube IDE, e2Studio, Tinker CAD.**

**• Communication Protocols: UART, I2C, SPI, CAN.**

**• Version control: GIT LAB. • Software Development Life Cycle: Waterfall Model, V-Shaped Model, Iterative Model, Spiral Model, Big Bang Model, Agile Model.**

INTERNSHIPS

In Plant Training of 15 days workshop training provided by Bit Electronics on MATLAB

ACADEMIC:

Project Title:

* . To limit the Faulty current flowing through the transmission line using isolation transformer in series with transmission line

Description: - Practically the project is about limiting the v magnitude of fault current flowing through the transmission line by using isolation transformer in series with transmission line in order to avoid any further damages to household equipment and to protect the system due short circuits.

PUBLICATIONS:

* IJRTE Paper Published on “Fault Current Limitation by using Series Transformer”
* International journal of Recent Technology and Engineering (IJRTE) ISSN:2277-3878, Volume-7 Issue-2, May 2018

LANGUAGES KNOWN:

English

Hindi

Marathi