## Muthukrishnan.M

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Date of Birth: 18th OCT 1998

#### Job intention: Embedded developer

#### **Profile Summary:**

A mid-level Embedded Engineer with solid experience in hardware design, microcontroller programming, and firmware development. Specialized in enhancing hardware performance and optimizing system efficiency for large-scale technology implementations. Adept at identifying opportunities to improve hardware and software integration, troubleshooting complex issues, and driving innovation in embedded systems.

#### **WORK EXPERIENCE**

#### Embedded Engineer /Jan 2024 - present

#### **Dotworld Technologies Private Limited , Coimbatore.**

- 1. Perform rigorous simulations and testing of designs to ensure optimal functionality, meeting both performance and regulatory standards.
- 2. Collaborate with cross-functional teams, including software and mechanical engineers, to ensure seamless integration of hardware and software components.
- 3. Mentor and guide junior engineers in design processes, best practices, and troubleshooting.
- 4. Contribute to the improvement of existing products by analyzing failure modes and proposing design improvements.

## Electronics Hardware Design Engineer / Associate Engineer (R&D)/Sep 2022 - Nov 2023 Fludyn Advanced Technology Center ,Unit Of C.R.I Pumps Private Limited ,Coimbatore.

- 1. Design a PCB Schematic.
- 2. Review the PCB Design, Schematic, Assembly & Production planning & support.
- 3. Research & Development the cost effective circuit & design.
- 4. Update and write a simple logic correction in the existing firmware(software).

# Electronics Hardware Engineer / F&H Contract (R &D) /Nov 2020 - Aug 2022 Fludyn Advanced Technology Center ,Unit Of C.R.I Pumps Private Limited ,Coimbatore.

- 1. Solar Drive & Single Phase Motor Control
- 2. PCB board Designing ,testing & Debugging
- 3. Handled the major tasks of testing the circuits and features of electronic equipment.

4.

#### **Electronics Hardware & Testing Engineer**

#### Aug 2019- Aug 2020 / TUFF PUMPS, Unit Of C.R.I Pumps Private Limited

- 1. PCB board assembling & testing
- 2. Electrical Device Validations & Endurance Test

#### **EDUCATION**

- 1. B.E. (EEE) Anna University, Rajas Engineering College, Tirunelveli, CGPA: 6.38
- 2. HSC State Board, Govt. Hr. Sec. School, Tirunelveli, 69%
- 3. SSLC State Board, Govt. Hr. Sec. School, Tirunelveli, 84%

#### **PROJECT**

Monitoring System For Solar Panel Using Smartphone Based On Microcontroller.(College)

#### Dotworld Technologies Pvt. Limited projects:-

#### Auto Sash Project for Kewaunee

Spearheaded the development of an automated sash control system for Kewaunee's laboratory furniture. Managed both hardware design and software development, ensuring seamless user interaction and enhanced safety features for laboratory environments.

#### • Sweeper Machine Controller

Oversaw the design and development of the controller for an autonomous sweeper machine. Handled both hardware and software aspects, including motion control hardware design and programming for obstacle detection and optimized cleaning patterns.

#### Robot Sensor Interface Board for GoatRobotics

Developed the hardware and software for a sensor interface board used in robotic systems. Integrated multiple sensors for real-time data collection and programmed the system to ensure smooth communication between hardware and software.

### PROFESSIONAL COURSES(Oct 2023 - Dec2023)

Diploma in Embedded system included C,Embedded C,PIC,STM & Serial communication Interface (UART, SPI,and I2C) in Manfree Technologies Coimbatore

#### **TECHNICAL SKILLS**

- 1. Handle experience in DSO, DMM, RPS.
- 2. UART, SPI, I2C, CAN (Basics)
- 3. Work Knowledge in GSM,GPS,Bluetooth,RTC,EEPROM.
- 4. Work experience in Semiconductor Device, Sensors, Transducer, Intelligent Power module (IPM) Inverters, Power converter topology like AC/DC (SMPS).
- 5. Design & development of electronics & electrical components & boards Test the Analog & op-amp based electronic boards.
- 6. Experienced as Production Development Engineer.
- 7. Skills in Soldering, Circuit Reading, Usage of Analog and Digital Electronics Instruments & PCB board
- 8. for Testing & Trouble Shooting and also gained experienced in the field of Electronics.
- 9. 8D reports.

## **Software Proficiency**

- \* KiCad, Altium
- \* Packages MS Office
- \* C & Embedded C
- \* PIC16FXX,STM32F1XX.
- \* VS CODE

## **Strengths**

- \* Ability to learn & adapt quickly to new environments quickly.
- \* To work as a Team & Team Coordination.
- \* Technically handling Projects and Applications.

#### Declaration

Herewith, I certify that the above stated information is true to the best of my knowledge and belief. I sincerely pledge that I will offer my faithful service to the entire satisfaction of my superiors and work with true spirit for the growth and welfare of my esteemed organization I'm employed.

Date: Yours faithfully,

Place: M.MUTHUKRISHNAN