LINGAMPALLI ROOPAVATHI

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CAREER OBJECTIVE:

Looking forward to being part of your team by obtaining the role of Embedded Software engineer where I can employ both theoretical knowledge and practical experience in firmware development.

PROFESSIONAL SUMMARY:

- Overall, 4.11 years of experience as an Embedded Software Engineer.
- Expertise in C, Embedded C and Assembly language.
- Strong debugging and testing skills
- Working experience with communication protocols [UART /USART, I2C, SPI]
- Having good knowledge on 8-bit micro controllers [AT89C51, PIC16F877A, PIC18F4550]
- Practical knowledge on interfaces like EEPROMs, ADC, UART/USART, 7-Segment Displays, Motors, LCDs, PWM and MSSP modules.
- Having working experience with wireless modules like GSM and AVR-IOT-WG development board from Microchip.

WORK EXPERINCE:

ENGINEER -SOFTWARE | Mobiveil Technologies India Pvt Ltd, Hyderabad 18/08/2021 – 22/01/2024

Client: Qualcomm - Hyderabad

Responsibilities:

- Worked on WLAN wifi networks using 802.11 protocols.
- Develop and modify the existing software based on the Feature requests from clients
- Verifying and testing the developed software on various devices using BIT-POOL machines to verify the performance of the device.

EMBEDDED SOFTWARE ENGINEER | Yalamanchili Engineers PVT.LTD, Vijayawada 16/11/2020 - 31/07/2021.

Responsibilities:

- Develop code within established guidelines; work and decisions are reviewed by CEO and technical leads before implementation.
- Working independently to develop generalized and structured software for devices.
- Software development, testing and debugging on various platforms including development boards.
- Provide timely communication on significant issues or developments

EMBEDDED SOFTWARE ENGINEER | NXM INDIA PVT.LTD, Bangalore
9/10/2018 - 30/09/2019.

Responsibilities:

- Create, implement and coordinate engineering product development projects that will support the creation, design and improvement of electronic products.
- Developing the software for existing projects.
- Verifying and testing the existing software in the lab with physical modules as well as simulators and Debuggers.
- Documentation that specifies the design and implementation of a project.
- Strong background in Embedded Software development.

EMBEDDED SYSTEMS TRAINING | Jagruti Technosys Pvt Ltd, Hyderabad
16/12/2017 - 16/06/2018.

- Advanced Embedded Systems Training in Jagruti Education and Welfare Society under DDU-GKY in course of Advanced Embedded systems for a period of 6 months.

JUNIOR TEST ENGINEER | Astra Projects, Hyderabad 27/09/2016 - 31/05/2017

Responsibilities:

- Testing assembled boards of LED bulbs, Tube-lights etc.
- Soldering the components and design the boards.
- BOM verification.

EDUCATIONAL QUALIFICATIONS:

- B.Tech (ECE) , Vignan Institute of Technology and Science, 67.77%, (2016).
- Intermediate, Omega Junior College, 73.33%, (2012).
- SSC, Wesley Co-Education High School with 70.5%, (2010).

PROJECTS:

- **Title:** Digital Clock Using 7-Segment display
- **Tools used :** MPLAB X IDE, Proteus 8.11
- **Description:** The main objective of the project is to Develop a Digital clock in HH.MM.SS format using PIC8F4550 Micro controller, DS1307 RTC module and 7-Segment display. Here, six 1-digit 7-Segments are multiplexed for displaying Hours, Minutes and Seconds. The Time can be updated using provided Push button switches.

- **Title:** Libraries Development for Single LED & 7-Segment Displays
- **Tools used :** MPLAB X IDE, Br@y++ Terminal V1.9b, Putty
- **Description:** The project is to develop Generalized and Structured Functions and Libraries possible with Single LED (Normal & RGB) and 7-Segment Displays (1-digit, 4-digit etc).

- **Title:** AVR-IOT-WG development board
- **Tools used :** Atmel Studio 7
- **Description:** This project set up an IoT development environment and configures the AVR-IoT-WG board and Google Cloud to run an application that reads hardware sensors and securely transmits real-time data to the cloud.

- **Title:** GSM module (sim800) Interfacing with PIC16F877A
- **Tools used :** MPLAB X IDE, Br@y++ Terminal V1.9b
- **Description:** The complete project deals with interfacing sim800 module and standard 4-bit LCD display (PC066PGL) with PIC16F877A. The complete project has three main concepts of GSM namely controlling eight loads with SMS, data transfer to web (Thingspeak server) using HTTP protocol and file transfer to web (DriveHQ server) with FTP protocol.

- **Title:** Storing Binary file to external EEPROM using PIC16F877A
- **Tools used :** MPLAB X IDE, Br@y++ Terminal V1.9b
- **Description:** The project is interfacing 93LC46A-I/OT EEPROM with PIC16F877A micro controller and performs options like write, read, erase etc., using Bit-Banging method and storing 128 bytes binary file into EEPROM using Pic16f877a micro controller. With this concept, user can choose an option he wants to perform on EEPROM like write, read and erase etc., data from particular location.

TECHNICAL SKILLS:

- **Operating Systems:** Windows, Linux-Ubuntu
- **Programming Languages:** C, Embedded C & Assembly Language, Data Structures using C.
- **IDE and tools:** Keil, Proteus, MPLAB X IDE, Arduino IDE, Source Insight, Vim, Crashscope, Wireshark.
- **Embedded Platforms:** AT89C51, PIC16F877, PIC18F4550, Arduino UNO
- **Wireless modules:** GSM, AVR-IOT-WG development board
- **Communication Protocols:** I2C, USART/UART, SPI,802.11

DECLARATION:

I hereby declare that all furnished information and particulars are true and correct to the best of my best of knowledge and belief.

Place: Hyderabad
Date: 08/06/2023(LINGAMPALLI ROOPAVATHI)