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Professional Summary:

- ✓ More than 4 years of Experience in Embedded Systems.
- ✓ Hands-on experience to build digital circuits using PIC, ATMEL, STM microcontrollers.
- ✓ Worked on wireless module ZigBee.
- ✓ Efficiently worked on schematic designing using OrCAD 16.3.
- ✓ Development, debugging and troubleshooting of the software and Hardware.

Education:

- ✓ Bachelor of Technology in **ECE 2010-14** Jawaharlal Nehru technological University, Anantapur with **76%**.
- ✓ Intermediate in **MPC 2008-10** Srichaitanya junior College, SPSR.Nellore with **80%**.
- ✓ SSC Education in 2008 R.R public School, kavali with **83%**.

Technical Skills:

- ✓ Programming Languages : Embedded C, Basics of Linux
- ✓ IDE Tools : Micro C, MPLAB, Keil
- ✓ Protocols & APIs : SPI, I2C, UART
- ✓ OS : windows XP,7,8 and 10.
- ✓ Packages : MS Office
- ✓ Design Tools : OrCAD, Multisim, Proteus

Professional Experience Details:

- Worked as a **Technical officer in ECIL** form **Jan 2022 to Jan 2024**.
- Worked as an **Embedded Engineer in Rato Communications &Engineering Pvt ltd /pyramid electronics** form **Sep 2021 to Jan 2022**.
- Worked as an **Embedded Engineer in SEC Industries Pvt Ltd** from **Jun 2017 to Oct 2018**.
- Worked as **Apprentice in Bharat Dynamics Limited (BDL)** form **Mar 2016 to Mar 2017**.

Role:

- Developing firmware for embedded microcontrollers
- Developing firmware for SPI, I2C and UART protocols interfacing.
- Debugging the embedded code to find the bugs, and aiding the design for bug free.

Project Details:

Project 1(Jan 22 – Jun 23)

Title: ACCESS CONTROL SYSTEM

Description:

Access control system which consists of an Intelligent Biometric Access Controller (iBAC) unit which communicates with EBACS (Enterprise Biometric Access Control System) server through TCP/IP interface.

Role:

- Development, testing and maintenance towards various projects related to access control systems.
- Developed systems have been installed at various DAE units. Maintenance provided to fix issues raised at various client sites.
- Detection and rectification of faults in iBAC units.
- Have hands-on experience on programming and debug of microcontroller present in RFID card reader, developed using Embedded C in Keil.
- Have hands-on experience with some basic SQL queries in MSSQL and in SQLite.
- Have hands-on experience with some basic Linux commands using HyperTerminal.

Project 2 (Sep 21 – Jan 22)

Title : “16 channel Thermocouple scanner for NPCIL (kaiga)”.
Team Size : 1
Hardware : PIC16F1788, 74HC595, MCP3428, I2C, ADC, 7segment display.

Description:

16 channel thermocouple scanner is used in nuclear power plants. The system scans and displays the temperature of thermocouple continuously and compares with the set values of low and high temperature. Whenever temperature crosses the set value corresponding relay has to be ON and indicate the led.

Role:

Software:

- Developed the firmware using external ADC's, interfacing PIC Controller and MCP3428.
- Developed the firmware using I2C to read the data from external ADC's.
- Developed the firmware for 6-digit seven segment display.

Project 3 (Jun 17 – Apr 18)

Title : “LASER BASED LONG-RANGE AIMING SYSTEM (LLRAS)”.
Team Size : 2
Hardware : PIC18F46K22, MCP23S17 ADC, DAC, UART, SPI, Zigbee.

Description:

Laser based Long-Range Aiming System is an outdoor simulator to test the Gunner performance during training. The target is placed at a distance of 1Km which is controlled by trainer instructions given in system through wireless module.

Role:

Software:

- Developed the firmware using SPI1, interfacing PIC Controller and MCP23S17.
- Developed the firmware using UART2, interfacing PIC Controller and Zigbee (S3B in API mode).
- Developed the firmware using UART1, interfacing system and PIC Controller.
- Developed the firmware using internal ADCs to monitor the sensors status.
- Developed the firmware for hardware interrupt.

Hardware:

- Developed mechanical part to move the target module.
- Pan-tilt mechanism using high actuators within micrometer accuracy.

Project 4 (Jan 18 – Jun 18)

Title : “HIGH VOLTAGE FIRING UNIT”.
Team Size : 3
Hardware : TPS65563A(photo flash IC) ,LM2576(Buck converter), PIC18LF25K22

Description:

The design of High Voltage Firing Unit which operates on two commands CMD1 and CMD2. On CMD1 input range 3.5V-16VDC the unit should start charging the energy storage capacitor (HV capacitor) up to an output of 840V. When CMD2 comes the unit should rapidly discharges the capacitor on the load.

Role

- Developed the firmware using ADC, to take feedback when it reaches the maximum voltage.
- Developed the firmware using GPIO, to give the input to TPS65563A for charging.

Apprenticeship (Mar 17 – Mar 18)

- Worked in Design and Engineering division in BDL.
- Worked on Counter Measures Dispensing System(CMDS) which is used in warfare to misguide the enemy missiles by dispensing the flares(flame)and chaffs(fog).

Personal Details:

Name : Uppala Srichandana
Marital status : Married
W/O : Singothu Swamulu
DOB : 08-07-1993
Nationality : Indian

Declaration:

I hereby declare that all the furnished information is true to my best of knowledge.

Place :

Date :

[Uppala.Srichandana]