**RESUME**

**ASWATHRANGARAJ K S**

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**CAREER OBJECTIVE**

To secure a challenging position where I can effectively contribute my skills as Professional, possessing competent Technical Skills.

**EXPERIENCE SUMMARY**

* Around 2 years 11months of experience in **Embedded System Design**
* Hands on Experience in **Internet of Things**
* Experience in Programming **LPC2148, PIC16f877a, Arduino Uno, MSP430, CC3200.**
* Hands on Experience in **MATLAB M-Script, Simulink** and **GUI.**
* Hands on Experience in **PCB Designing, Simulation** and Basic**Hardware testing**.
* Good Knowledge in **GSM, GPRS, WiFi,UART, I2C, SPI, CAN** protocol.
* Good Knowledge in **C** and **Electronic Components**.

**TECHNICAL PROFICIENCY**

**Languages** : C, C++, Embedded C, M-script.

**Protocols** : GSM, GPS, Wifi, Bluetooth, I2C, SPI, CAN.

**Knowledge On** : MATLAB, Proteus 8 professional, Keil, ARDUINO IDE, MPLAB, Energia.

**WORK EXPERIENCE**

Company Name : **MAS DATA Technologies**, Coimbatore. Role :**Embedded Software developer**

Period : Jul’2015 to May’ 2017.

Company Name : **Caliber Embedded Technologies Pvt Ltd**, Coimbatore. Role :**Intern in MATLAB and Embedded Software development.**

Period : Jun’2014 to Jun’2015.

**PROJECT**

1. **Project : Smart Irrigation System using Internet of Things**

Tools : CC3200, Soil Moisture, Water system

Role : Development of automatic watering system and cloud interfacing.

Description : To control the automatic watering system with the help of soil moisture sensor. The monitoring of irrigation process through internet over ESP8266 is done

1. **Project : CAN protocol based driving system with indication control**

Tools : Arduino Uno, CAN Transceiver (MCP2515, MCP2551), Servo motor, Lamp

Role : Design and Programming for CAN interfacing with servo motor

Description : To synchronize the headlight and indicator working with steering wheel movement

1. **Project : Internet of Things based Garbage Monitoring System**

Tools : Arduino, GSM, Ultrasonic sensor, RFID reader,ESP8266 Wifi,

Role : Development of design and programming with cloud interfacing

Description : To monitor the garbage filling data in cloud and once garbage is filled an automatic SMS using SIM900 to concern person is send. The authentication of person responsible to collect the garbage was provided with RFID for verification of collection with location identification.

1. **Project : Safety secure system for Land Miners**

Tools : ARM LPC218, I2C, Zigbee

Role : Development of design and programming for serial port

Description : To monitor and alert the Land Miners under construction, a helmet was made to wear which monitors health parameters and other toxic gases.

1. **Project : Automatic traffic systems in Automobiles**

Tools : PIC16f877a,DS1307, AT24C26 and Zigbee

Role : Development of design and programming for serial port

Description : To monitor and alert the Land Miners under construction, a helmet was made to wear which monitors health parameters and other toxic gases.

1. **Project : Wheel chair control using BCI (Brain Computer Interface)**

Tools : Arduino Uno, MATLAB, Neurosky

Role : Development of Matlab program and interfacing of Matlab with Arduino.

Description : To control the wheel chair movement based on EEG through bio sensors by measuring the neural activity with help of Bluetooth module from neurosky kit.

1. **Project : Fault detection in turbocharger using GA optimization technique**

Tools : MATLAB, AutoCAD Role : To Develop Genetic Algorithm for various profiles of turbocharger.

Description :To provide an optimized disc parameters such as core cavity, inner radius, outer radius, depth and area of the disc. These parameters are optimized through Genetic algorithm in M-Script. Finally validate through AutoCAD tool.

**LEADERSHIP SKILLS**

* Have been the **CO-ORDINATOR** of the program **HACKTRICKS – 2012** a National Level Hacking Championship organized by **iSwcLABz**.
* Have been the **CO-ORDINATOR** for Intradepartmental Technical Symposium at **KPRIET**

**EDUCATIONAL QUALIFICATIONS**

* Master of Engineering in Embedded System Technologies (Anna University), RVS college of Engineering, Coimbatore, TN. **CGPA: 8.36** Jun-2015.
* Bachelor of Engineering in Electronics and Communication Engineering (Anna University), KPR Institute of Engineering and Technology, Coimbatore, TN. **CGPA: 8.04** April-2013.
* HSC (12th), State Board, S.S.M LAM Hr. Sec. School, Komarapalayam, Nammakal Dist. **Percentage: 83%** April–2009.
* SSLC (10th), Matriculation, S.S.M LAM Hr. Sec. School, Komarapalayam, Nammakal Dist. **Percentage: 82%** April–2007.

**ACADEMIC PROJECT**

* Efficient scheduling for power/energy management and memory partitioning using RTOS
* Propeller display system using Embedded System
* Heart beat sensor using MSP430
* Low power consumption of LED lamps.
* Speed Control of AC & DC Motor

**PERSONAL STRENGTH**

* Ability to learn new technologies
* Ability to handle a team
* Hardworking and good at task accomplishment.

**PERSONAL DETAILS**

Full Name : Aswathrangaraj K S

Father Name : Srinivasan L M

Marital Status/Sex : Single/Male.

Date of Birth : 16-08-1991

Known Language : English, Tamil and Kannada.

Permanent Address : Sathya narayanan nagar, Choolaimedu, Chennai.

**DECLARATION**

 I hereby declare that the above-mentioned information is correct up to my knowledge and I bear the responsibility for the correctness of the above-mentioned particulars.

Place: Chennai

Date : 22-05-2017 (ASWATHRANGARAJ K.S**)**