Kaushik M.K.

Phone : +91-9591089804
Email : mkkaushiksjce@gmail.com
Linkedin : https://www.linkedin.com/in/kaushik-m-k-603919a6/
Skype: mkkaushiksjce

I'm an engineer who always looks for challenging problems. I have industry experience in software and hardware design and I apply my skills to provide optimum solutions.

Skillset

Programming Languages - C, C++, Javascript

Software Tools   - Matlab, NI-Labview, Ansys, IAR Studio,

Segger Embedded Studio, STM32Cube IDE, Eclipse IDE

Experience in building **Firmware** for **Embedded Systems** using **C**

Experience in **Nordic (S140)** and **STM32 Bluetooth Stack** and Designing **Bluetooth Low Energy Systems** (4.0 and 5.0)

Worked on **Atmega**, **TI-MSP430, Nordic nRF52840** , **STM32**, controllers

Experience on **PCLInt Plus Static Code Analysis** Tools (**MISRA-C**), **ResharperC++** and **Code Coverage**, **Code Quality** and **Safety Standards**

Experience in **TDD**, **Unit Testing** and **Build Automation**

Experience in **IOT** connectivity applications using **Javascript** and **NodeJS**

Good understanding of **Communications Systems**

Good understanding of **Agile methodologies**, **CI/CD**, **Git**, **Jira**, **Bitbucket, Github** and **Linux** Operating System

Proficiency with electronics bench test equipment such as oscilloscopes, logic analyzers

Experience

ABB
June 2019 - April 2020, Ability Innovation Center, Bengaluru

I have worked on integrating **Bluetooth Low Energy** (4.0 & 5.0) to ABB devices and implemented **Bluetooth Beacon** features and implemented **Build automation** scripts for IAR Studio for CI/CD. I have also worked on integrating **Static Code Analysis** using ResharperC++ and PCLint Plus. I gained experience in the Industrial **Automation** domain and **Embedded Systems** Development.

YMediaLabs
November 2015 - July 2018, Bengaluru

I worked as an Associate software engineer at YMediaLabs, one of the top digital strategy, design and technology companies. I have gained an experience of developing industrial grade **IOT systems** and supporting

software. I have worked with top firms like **L'oreal, Masterbuilt and Molekule**.

Systems Lab, CeNSE Lab, IISC

June 2013 - August 2013, Indian Institute of Science, Bengaluru

Me and my teammates were involved in development of embedded systems which could transfer data from **SPI protocol** based systems to **USB** storage drives using microcontrollers **TI-MSP430** and **FTDI microcontrollers**.

Education

Masters in **Digital Electronics and Advanced Communication** from **Manipal Institute of Technology,** Manipal (MIT) - **2020 Batch**

Bachelors in **Electronics and Communication Engineering** from **Sri Jayachamarajendra College of Engineering**, Mysore (SJCE) - **2015 Batch**

Awards

Won **Spot Award** (July) in **ABB** for providing solution in Temperature measurement product.

Awarded **Best Performer of the Quarter** for my contribution to multiple projects at **YMediaLabs**.

Won 3rd prize for the project "**Physical Exercise Responsive IR based Alarm Clock-2.0**" in "**Anveshana 2013**" conducted by **Agastya International Foundation**.

Projects

1. Interface of Bluetooth Low Energy to ABB Devices

I have worked with adding **Bluetooth 5.0** to **ABB devices**. **Nordic NRF-52840** controller was used for the bluetooth functionality. Data which was received from **multiple industrial communication protocols** were transferred from ABB devices to Android App. I was also involved in the design of **BLE Beacon**.

2. Molekule IOT Interface

I was involved in development of **IOT** functionality for the Molekule **Air** purifier product using the **MQTT** protocol in Javascript language. The **air quality data uploaded** from the air purifier was viewable from the mobile application.

3. Illumination Invariant Face Recognition

The existing face recognition techniques are affected by **uneven illumination** on the subject. A novel method to minimize the effects of irregular lighting using **Histogram of Gradient (HOG)** feature was designed and implemented.