Rohith Samineni

Embedded Systems Enthusiast

✆ 7737292776
✉ rohit7svp@gmail.com
⌂ https://rohitsam.github.io/
DOB: May 20, 1997

Work Experience

June 2017 – December 2017 — **Embedded System Intern**, Ahoy Systems pvt Ltd., Gurugram, India.
Design of various prototypes for various client needs on ARM and PIC MCUs, Develop firmware for various products on ARM and PIC MCUs, Automation of QA process through Shell scripts, Configuring routers for various IOt applications,worked with various communication like UART and I2C ,Procurement of required material and right enclosures.

June 2016 – August 2016 — **Research Student**, NIIT University, Rajasthan, India.
As part of NU-RAP (NIIT University Research Assistance Program), worked on a research project to detect a moving object in a frame and track its motion. The concepts of Digital Image Processing were used. The project was implemented using OpenCV in Python. Successfully applied the algorithm to multiple video feeds.

Projects

Aug 2015 – Dec 2015 — **Color Sensor**, .
Coded the Arduino based Color Sensor that takes input from a LDR when RGB led throws light on the given object.

Feb 2017 – May 2017 — **Sensor-based Monitoring System for Railway Track Defects**, MATLAB, C.
The project involves designing and implementation of RAM-NDT and analyzing the audio data to find the type and position of defects.

June 2017 – Jul 2017 — **Text only Drivers of TFT-LCD for PIC micro-controllers**, MATLAB, C.
Developed Text drivers of the ILI9325 chipset for PIC on PCW compiler by studying the similar drivers written for other micro-controllers like Atmega328 and stm32

Mar 2018 – . — **Autonomous Bot**, Python.
Modified Rc toy car into self driving car using Donkeycar Library and Raspberry-pi.

Aug 2015 – Dec 2015 — **Crash Bird**, ProcessingJs.
This is a web game designed using ProcessingJS, JavaScript and facebook JavaScript sdk.

Aug 2016 – Oct 2016 — **Auto Balancing QuadCoptor**, .
A quad copter with a flight control system consisting only of an Arduino Uno and MPU-6050. It is able to stabilize itself in windy conditions. Auto-level means that when you release the pitch and roll controls on your transmitter, the multi-copter levels itself.

Jun 2016 – Aug 2016 — **Chrome Ext**, JAVASCRIPT Programming.
A chrome extension that parse the excel file(xls.js) given by the user. This file is stored in chrome using chrome storage api and notification of the status is given.

Research Papers

Performance Enhancement and IoT Based Monitoring for Smart Home , IEEE Explore.

Skills & Abilities

Programming Languages	c,c++,Python,Assembly,MATLAB,Shell, HTML
Frameworks	OpenCV
Software	Keil's uvision,PCW,ARM's Mbed,MATLAB, Anaconda, Jupyter Notebook

Certification

Feb2017–Jun2017	**DeepLearning NanoDegree**, UDACITY.
Jan 2016	**Drone design and development**, ATLEAD PVT LTD.
May2015–Jul2015	**Think. Create. Code.**, THE UNIVERSITY OF ADELAIDE THROUGH EDX.

Education

2014–2018	**NIIT University**, *Bachelor of Technology*, *Electronics and Communication Engineering*.
2012–2014	**Vijaya Ratna jr College**, *Intermediate*, *Maths Physics and Chemistry*.
2011–2012	**The Nalgonda Public School**, *Matriculation*, *CBSE*.

Coursework

- Micro-Controllers And Micro-Processors
- Understanding Pic,Atmel Micro controllers and different communication protocols like SPI,I2C
- Advanced Embedded Systems
- Arm Processors, RTOS, CAN,Timers
- Power Electronics
- power electronic converter circuits for AC-DC, DC-DC and DC-AC power conversion.
- Control Theory
- PID controllers,Mechanical control sys, Root Locus,Nyquist plots
- Internet of Things
- Mqtt,Coap,Cloud Integration
- Communication Networks
- Fundamental network architecture concepts

Languages

English, Hindi, Telugu