

Embedded Software Consultant, Drone-developer Embedded Software Consultant,  
Drone-developer Embedded Software Developer (Actively looking for job change) San Antonio, TX  
Seeking opportunity in Software development, preferably in Embedded Software Development.  
Pursuing Master's in Computer Engineering at University of Texas at San Antonio. 4.5 years of  
work experience in Microcontrollers and Embedded Software Development Good Programming  
skill in C Language, Python, BASH scripting languages. Working knowledge of Linux, Windows  
Environment & development tools like IAR Workbench, KEIL, Atmel Studio, Code composer Studio  
and Good Knowledge on Internet of Things. Work Experience Embedded Software Consultant,  
Drone-developer [dronedeveloper.org](http://dronedeveloper.org) - San Antonio, TX June 2018 to Present Worked on Intel Aero  
Drone LTE network extension ? Studied in-depth about 'Ardu-Pilot open source architecture',  
QGround control and Mission planner software. Graduate Research Assistant (GRA) The University  
of Texas at San Antonio - San Antonio, TX January 2018 to August 2019 Thesis Smart Self  
Powered Weigh-in-Motion System (In collaboration with CPS Energy and U.S. Department of  
Transportation) ? Implemented a generic algorithm for Vehicle Classification (Patent Application in  
progress) ? A single sensor system which extracts information like gross weight, Axle counts, speed  
of vehicle. Solar Traffic Light Safety and Vehicle Classification project ? Worked on development  
of C code on Panasonic Grid-EYE Infrared Array Sensor. ? Worked on C code development on TI s  
IWR1642 BOOST mmWave DSP and MCU Radar evaluation module. Embedded Software  
Engineer Orange Ventures United India Pvt. Ltd - Pune, Maharashtra January 2015 to July 2017  
PestWatcher (Ref: [www.pestwatcher.nl](http://www.pestwatcher.nl)) project: ? Worked on development of C code on IoT  
gateway and sensor node. ? Used SimpliciTI Low Power RF protocol in sensor node. ? Worked on  
MQTT IoT protocols and Apache TOMCAT 8 web server. ? Worked on Configuration of WIFI/BLE  
settings on Raspberry Pi and implementation of Scripts using Python. LoRa IoT platform project:  
An open source long range, low power wireless IoT platform. ? Implemented End to End LoRaWAN  
IoT framework (Sensor to cloud). ? Worked on integration of LORANK Gateway (Debian OS) and  
Open Source LoRa Server and Node RED programming tool. ? IoT sensors: Worked on Load Cells,  
Motion sensors (PIR), Accelerometer Sensors, SONAR, Hall-effect sensors, Reed switches,

Temperature (LM35) sensors, GPS/GSM/GPRS/WIFI modules. Knowledge of complete life cycle of 'Embedded System Design' -Electronics, Firmware, Casing, CE Product Certification. Ported C Code in Atmel, ST, MSP 430 platforms and experience with Agile environment. Education Master of Science in Computer Engineering in Computer Engineering University of Texas at San Antonio - San Antonio, TX August 2019 Post Graduate Diploma in Integrated VLSI and Embedded in systems design Centre for Development of Advanced Computing(C-DAC) August 2014 Bachelor of Engineering in Electronics in Electronics Vishwakarma Institute of Information Technology, Pune University - Pune, Maharashtra May 2013 Diploma in Electronics Engineering in Electronics Engineering Puranmal Lahoti Govt. Polytechnic July 2009 Skills Arduino, Python, Raspberry pi, Gprs, Rs232, Linux, Dsp, Eclipse, Bash, Gps, Soc, Spi, Rf, Arm, Avr, Cortex, I2c, Windows xp, Git Links <https://github.com/Gopal9028> <http://www.linkedin.com/in/gopal-vishwakarma> Additional Information TECHNICAL SKILLS Operating Systems: Linux (Ubuntu, Debian), Windows XP/7/10 Languages: C Language, Python, BASH/Shell Script Protocols: RS232, I2C, SPI, MQTT(IoT), LoRaWAN (IoT), SimpliciTI RF. Hardware Platform: ARM Cortex-M processors: STM8L1528 Eval, ST Discovery/Nucleo Board, ADuCM3029 ARM Cortex-A processors: Beaglebone Green/Black ARM Cortex-R processors: ARM R4F MCU AVR processors: Atmel SAM S20 Xplained PRO, Arduino Pro Mini, Mega 2560 Other processors: CC1110(TI Sub1 GHz SoC), MSP430(Ultra low Power MCU), Raspberry Pi 2/3, TI C674x DSP Developmental Tools: ST Visual Develop, PyCharm, IAR, KEIL, Eclipse IDE, Atmel Studio7.0, Code Composer Studio, Modules: GPRS (Telit GL865), GPS (Telit JN3), Wi-Fi (USR C322, USR 232G2), Accelerometer (ADXL 345)

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