

S U R Y A V A R D H A N



EMBEDDED SOFTWARE ENGINEER

[HTTPS://SURYEAH.GITHUB.IO/](https://suryeah.github.io/)

CONTACT

Address

Bangalore, Karnataka, 560091

Mobile:

+91.8870858022

Email:

surya_24@live.com

CERTIFICATIONS

- Advanced Embedded Systems, Vector India, 2019

INTERNSHIP

- Regenerative Braking System for ARJUN MARK 3 MBT [R&D], **DRDO - CVRDE**, 2017

PROGRAMMING SKILLS

C / Embedded C	<div><div></div></div>
C++ / Assembly	<div><div></div></div>
Shell Scripting	<div><div></div></div>
Python	<div><div></div></div>

COMMUNICATION

English	<div><div></div><div></div><div></div><div></div></div>
Tamil	<div><div></div><div></div><div></div><div></div></div>
Telugu	<div><div></div><div></div><div></div><div></div></div>
Hindi	<div><div></div><div></div><div></div><div></div></div>
Kannada	<div><div></div><div></div><div></div><div></div></div>

PERSONAL INTERESTS

Hobbies:

- Travel to connect with new people.
- Surfing for new tech gadgets online.
- Home and mobile automation for ease of life.
- Implementing projects in various domains on self-interest for self-satisfaction. [HTML, CSS, WordPress based web design, Galaxy Watch Face Design]

ABOUT ME

Dynamic and innovative embedded engineer with a built-in sense of Responsibility. With the help of an Energetic and self-motivated attitude materialized 5+ new product in a short span of 1.2 years. Currently seeking to take up new challenges in developing critical systems simultaneously growing up the organization and my skills.

EDUCATION

Veveaham HrSec School

Completed
03/2013

PCMC, High School

State Board – Marks 82%
Tirupur, Tamil Nadu

CIET

Graduated
04/2017

Mechatronics, Bachelor of Engineering

Anna University – Marks 65.1 [CGPA]
Coimbatore, Tamil Nadu

EXPERIENCES

As Embedded Engineer in SENPRONICS

08/2019 -
Current

- Meeting with **clients** and the software design team to determine **software specifications**
- Support the customer realize the product application from Start of Development (SoD) to End of Verification (EoV)
- Electrical Design, Hardware Design and writing the **embedded software code according** to desired specifications
- Testing the software for scalability and structure.
- Implementing** the embedded system and **interpreting error** reports
- Troubleshooting, Debugging, fix bugs, and optimize the system
- Maintain & Validate the software program
- Sole responsible person for complete **Life Cycle of an embedded software system**
- High-level writing and **documentation** skills for Creating **Data Sheet**, Whitepaper, and Brochures
- Maintain the **organization's central server**, Includes the configuration of NAS, LAN, WAN, Ethernet HUB. [N/W Admin]
- Interact with client** and Development team to get the project delivered as desired by clients
- Attend meetings with new clients to understand the complexity of the product development and provide **feedback** about taking up the challenge
- Recruitment** of Technical Staff.



SOFT SKILLS

Communication	●●●●
Building Rapport	●●●○
Interpersonal Skills	●●●●
Good Coordination	●●●●
Self-Starter	●●○○



PERSONAL INFORMATION

Birthday:
14 DEC 1995

Gender:
Male

Father's Name:
Mr. D. Manikandan

Nationality:
Indian



PATENT DETAILS

Title: Automated Security System and Method for Motor Bike Locking

Application No: 20164103054.

Issue: 09/2016

International Classification:
G08B21/00



CLIENTS HANDLED

- Tata Steels, Pune
- Indian Institute of Technology, Delhi
- National Institute of Rock Mechanics, Bangalore
- Ratnagiri Impex, Bangalore.
- Millennium Technologies [p] Ltd, Bangalore.
- Defence Research and Development Organization, Assam.



TECHNICAL PROFICIENCY

Controller/Hardware Architecture & Protocol

ARM Cortex M3 [STM32F103RCBT6]	8051 [AT89S52, N76E003, ATmega329]	ARM Cortex M4 [MK66FXM0VMD18]
ARM Cortex M7 [IMXRT1062DVJ6A]	ARM Cortex M0 [STM32F030C8T6]	ARM 7 [LPC214x]
CAN / UDP /EEPROM	UART, I2C, SPI, TCP	IPC/Multithreading

Software & Tools

Keil MDK	Arduino IDE + GDB	ESP-IDF
MPLAB X	Solid Edge	NI LabVIEW
PyCharm / Git	Visual Studio + Micro	MATLAB[Autosar]



PRODUCTS DEVELOPED

RF Signal Generator

Role: Firmware Developer. Team Size: 2
H/W: AD9951 / AD9959, STM32F0103, OLED, 4*4 Keypad
S/W: LabVIEW. STM32CubeIDE
Clients: Indian Institute of Technology, Delhi.

Earthquake Detector

Role: System Developer. Team Size: 3
H/W: ESP32-D0WDQ6, ADXL345, Geophone
S/W: TCP Client – Putty, ESP-IDF
Client: National Institute of Rock Mechanics, Bangalore.

Portable Seismic DAQ Unit

Role: Project Lead. Team Size: 2
H/W: RPi 3 Mod B, AT mega 328P, LTC1859, LiPo Battery Pack
S/W: Linux Distro for RPi. Terminal
Client: National Institute of Rock Mechanics, Bangalore.

High Precision Remote DAQ

Role: Hardware & Firmware Developer. Team Size: 2
H/W: DS162 Spartan 6 FPGA, MK66FX1M0VMD18, ESP32-D0WDQ6
S/W: TCP Client – Kitty, Arduino IDE, ESP-IDF
Client: Indian Railways

RF2.4GHz Remote Tree Climber

Role: Firmware Developer. Team Size: 2
H/W: N76E003, nRF24L01+, ULN2003, LiPo Battery Pack,
Relay, Switches, Servo Motors, DC Motors.
S/W: Keil µVision 5
Client: Ratnagiri Impex, Bangalore.

Man Pack – Bomb Detonator Jammer [433MHz]

Role: Firmware Developer. Team Size: 8
H/W: LiPo Battery Pack
S/W: Visual Micro IDE
Client: DRDO, Assam & Indian Army Infantry.

**Kindly visit the above given GitHub link to download product Datasheet*



DECLARATION

I, Surya Vardhan, hereby declare that the information contained herein is true and correct to the best of my knowledge and belief.

Surya Vardhan

Bangalore, Karnataka

March 2021