

# Abhishek Dongre

Embedded Firmware Engineer

## Profile

Embedded Firmware Developer with 2 years of experience in Microcontroller Interfacing, Device Driver Development and Model based software development. Proficient in embedded C programming. Expertise in Pointers, RTOS and Arm architectures. Proficiency with I2C, SPI, MODBUS protocols.

## Employment History

### Embedded Design Engineer at Electrolab Group Pvt Ltd, Ghansoli

March 2021 - Present

- Developing GUI Solutions for Touch screen user interface using Embedded C/C++, QT & SQL database on raspberry Pi platform.
- Developed Embedded software solution for project Bathless Heater, controlling 8 or 14 Heaters using timer based PWM on Silabs 8051 controller
- Designed & Developed Firmware for measuring the thickness of pharmaceutical tablets & calibrating the thickness according to the requirement.
- Developed firmware & implemented logic for managing the memory for resource constrained microcontroller i.e C8051F020.
- Added printing feature 80C, 40C for the existing product.
- Resolved complex issues for touchscreen user interface.
- Worked on Adobe Postscript printing description language
- Worked on Controllers like LPC1768, 1788, C8051F020, PIC24FJ2410.

### Embedded Software Engineer at Embin Technologies Pvt Ltd, Dahisar

December 2019— December 2020

- Designed & Developed firmware for IO board based on RS485, MODBUS RTU communication for Atmega controller.
- Developed device driver for IO Expander IC module based on I2C Communication.
- Contributed to the R&D of medical based project i.e Glucometer.
- Undergone training in FreeRTOS operating system on STM32 controller.
- Designed and implemented Bootloader.
- Wrote STM32 header file for memory mapped peripherals.
- Involving in full software development lifecycle including requirements, design, implementation, testing, and documentation.
- Reported the schedule and technical status on a regular basis and participated in program reviews internally and with the customers.
- ATmega 328P, STM32F446RE, STM32L476RG.

## Details

Ulhasnagar, 421004

Dist - Thane, Maharashtra

8087508494

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## Links

[Linkedin](#)

[Github](#)

## Technical Skills

C/C++

RTOS/LINUX

ARM cortex architectures M3/M4

STM32/8051/Atmega/PIC24F/LPC1768

I2C/SPI/RS485/RS232

CADSOFT EAGLE

IDE - Keil/STM32 cube/Atmel studio/Eclipse/MPLAB X

AB Micrologix 1400/Schneider Electric Twido/Siemens Simatic/Delta

Wonderware Intouch/Siemens Simantic Wincc

JTAG/SWD

## Trainee Engineer at SMEC Automations Andheri

December 2019 — December 2020

- Assisted in the Training of PLC and SCADA based softwares.

## Education

### Bachelor of Electronics Engineering, Bharat College of Engineering, Thane

July 2011 - July 2017

(6.46 CGPA)

### HSC, New English Junior College

June 2010 - July 2011

(63 %)

### SSC, Guru Nanak High School, Ulhasnagar

June 2008 - July 2009

(77.23 %)

## Certification

### Cortex M4 Architecture, Udemy

June 2020 — June 2020

### Embedded system Design, Bicard

June 2019 — November 2019

### Certified Automation Engineer, SMEC

July 2017 — December 2017

## Personal Details

Date of Birth : 2nd April 1994

Gender : Male

Marital Status : Unmarried

## Languages

English, Hindi, Marathi

## Hobbies

Playing Cricket & Carrom, Swimming, Reading Books, DIY Projects.

## Declaration

I hereby declare that all the above given information is true and correct to the best of my knowledge.

Date :

Place : Ulhasnagar

(Abhishek Dongre)