# **Ayan Pahwa**



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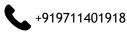


https://iayanpahwa.github.io





/in/iayanpahwa



#### **Work Experience**

- Embedded Software Engineer: Mentor Graphics- A Siemens Business, Global RnD, Automotive Business Unit, Embedded Software Division (June 2016-Present) (13/06/16 - 02/04/17 on contract position, 03/04/17-present as full time employee)
  - Worked on developing customised Embedded Linux distribution for automotive Advance Driver Assistance System(ADAS) and in-vehicle-infotainment(IVI) head units systems based on GEN-IVI compliant, on top of Mentor Embedded Linux(MEL), powered by open-embedded and yocto project.
- Embedded Linux DevOps Intern (Embedded software) : Mentor Graphics, Embedded Software Division (December,2015 May-2016)
  - Automating existing build and test suites like GStreamer, QT, wpasupplicant, connman, libcurl, iproute2 etc.
  - Major Project: WiFi test suite to test target connection to different configuration of an Access Point- open, WEP, WPA, WPA-2.
  - Major Project-II: BootBox to automate flashing of embedded targets.

#### **Professional Skills**

#### PC/Web

- Understanding of open source software licensing package porting and cross compilation.
- Experience working on professional agile and DevOps tools such as JIRA, Confluence, TestLink, Jenkins, Travis Cl, Github, GitLab, GitLab-Cl, Basecamp, WebEx.
- Experience in scripting using Bash shell and Python.
- Experience with Amazon Web Services tools.
- Sound knowledge of cyber security, vulnerabilities and attacks like DDos, Brute force, Phishing, SSL Stripping, Reverse Engineering networks, HID vector attacks.
- Sound knowledge of IoT protocols like MQTT, CoAP, LWM2M, BLE.
- Schematic, PCB designing, PCB fabrication, component selection and soldering(TH, SMD).

#### Embedded Systems

- Worked on Embedded Linux and RTOS based systems- Busybox, Yocto, OpenWRT, Debian, freeRTOS.
- Used toolchains for cross compilation CodeSourcery, Xtensa, Linaro, Yocto, AVR/ARM-gcc.
- Experience working with microcontrollers (8051, AVR, ARM7, MSP430, ESPrisiff-Xtensillia, ARM Cortex M4) with advance peripheral interfacing like i2c, SPI, UART, USB, CAN.
- Worked on projects based around radio frequency including Zigbee, Bluetooth Low Energy, WiFi, Infrared, Nordic based RF transceivers.

#### **Research and Publications**

S.No	Topic	Conference/Journal	Status
1	Automated Embedded Software DevOps using BootBox	IEEE ELECTRONICS MAKERS-2017	ACCEPTED and PRESENTED July 2017
6	Reverse Engineering IoT Devices	Hackaday, O'reilly, Apple iBeacons, HackrNews, Haki9 magazine(Poland), etc	August 2017 Reference: (https://goo.gl/ W3avbF)
8	Getting started with Embedded Python: MicroPython & CircuitPython	Speaker at PyCon India 2017	September 2017
9	Technical Reviewer of book - Designing purpose build drones using Pixhawk	Packt Publisher	December 2017

#### **Academics**

QUALIFICATION	SPECIALIZATION	INSTITUTE	BOARD/ UNIVERSITY	CGPA/ PERCENTAGE	YEAR
Bachelors of Technology (B.Tech)	Applied Electronics and Instrumentation	JRE group of Institutions	U.P.T.U	73.52%	2012 - 2016
XII	PCM	St.Lawrence Convent	C.B.S.E	67%	2012
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## **Projects Online Documentations**

Blog : GitHub : Element14 : https://codeNsolder.com http://goo.gl/ckVLpf http://goo.gl/diCxPO

### Other:

Date of Birth: August 27, 1994
 Youtube Channel: https://youtube.com/c/iAyanPahwa
 Passport Status: Available
 Current Location: New Delhi City, INDIA