Jay Kothari

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SUMMARY

Profesional is holding Master in engineering with specialization in Embedded system, having work experience of 7 years.

EXPERIENCE

Wipro (https://www.wipro.com/)   Pune, Maharashtra, India
Senior Software Engineer   March 2021 - Present

- Telematics-platform bringup and operating system services

Visteon Corporation (https://www.visteon.com/)   Pune, Maharashtra, India
Embedded software engineer   July 2019 - Feb 2021

- Smart core is single ECU that combines instrument cluster, a head-up display (HUD) and Visteon's infotainment platform into a single domain controller. Worked on Smart core platform bringup.

Matrix Comsec (https://www.matrixcomsec.com/)   Vadodara, Gujarat, India
Senior Software Engineer   Sep 2015 - July 2019

- Network video recorders(NVR) are product to record a video stream from CCTV camera over Ethernet. Design and development NVR.

SLTIET (https://www.sltiet.edu.in/)   Rajkot, Gujarat, India
ad-hoc Lecturer EC department   June 2012 - June-2013

EDUCATION

GTU PG School (Gujarat Technological University(GTU), Ahmadabad, Gujarat)
M.E. VLSI & Embedded Systems *GPA: 8.1*   June-2013 - June-2015

Atmiya (https://atmiyauni.ac.in/ , Gujarat Technological University(GTU))
B.E. Electronics and Communication Engineering *GPA: 8.2*   June-2008 - June-2012

SKILLS

Language:	c, c++
OS:	Good understanding of operating system implementations.
Linux:	Linux System Programming., Linux Kernel Programming, Linux Kernel Debugging skill.
Multi-Threading:	Multi-Threaded application design and development.
RTOS:	Worked with Xenomai Real Time driver development(RTDM).
QNX:	Worked on QNX.
git:	Understanding of software development workflow
Embedded linux:	Porting Linux on custom boards. Experience with Yocto
ARM:	Worked on ARMv7 architecture
Video streaming:	Streaming Video/Audio over RTP using control Protocol RTSP. Raw TCP streaming.

PROJECTS

Telematics-platform *c/c++/yocto/embedded linux/git*
Platform: Quectel SOC(AG35) and renesas rh850, Its a telematics control unit(TCU) for which our team is responsible for BSP and operating system services.

- Design and develope Persistence Manager using sqlite3 database. Its a client-server model Persistency Manager application.

- GPIO driver for linux kernel.

- Implemetation of low power mode for product.Handling synchronization between Vehical controller(VC) and SOC for various mode of product like service watcher mode, RTC sleep, Superlock mode and Update mode.

- Worked on defect and product stabilation activity. Analyze boot time and optimize the boot time using bootchartd.

Smart Core. *c/andriod linux kernel/git/hypervisor/QNX*
URL : `https:`
`//www.visteon.com/newsroom/delivering-digital-integrated-cockpit-solution-smartcore/`

Platform : Qualcomm 6155/6145 processor. Quectel module and renesas rh850 on single platform.
OS:QNX as type-2 hypervisor and Android running as guest OS.
Worked in OS/BSP team for porting and bringing up peripherals.

- Bring-up UART and i2c peripherals(like temperature sensor).
- Bring-up TFT display.
- Bring-up touch panel.
- Early display bring-up in QNX.
- Manage various product variant on the singe code base.
- Integrate the Qualcomm SDK versions.

Network Video Recorder *c/c++/linux system programming/network programming/*
URL : `https://www.matrixvideosurveillance.com/network-video-recorder.html`

Platform: HiSilicon 3536 processor(ARM Cortex A17) and TI DM8168(ARM Cortex A8).

- Implementation of recording modules in Network Video Recorder Product.
- Implement RTSP Client and RTSP Server using a live555 library.
- Design and implement a Camera initiation module in product.
- Design and implement 4 synchronous playbacks
- Implement decode and display module for Hi3536 processor.
- Design and implement a hardware test application for product in Qt.
- Porting embedded Linux on HI3536 processor.

Implemenatation real time linux driver. *c/linux device driver*
Code : `https://github.com/JayKothari/i2c_rtdm`
Article : `https://www.opensourceforu.com/2015/10/the-xenomai-project-a-linux-based-rtos/`

Platform : Beagle Bone Black with the Cortex A8 processor with 1GHz Frequency Code.
Description : Design, Implement and Test of Xenomai Real Time drivers(RTDM) for the I2C and
UART processor controller on Beagle Bone Black. This is was part of the Thesis in Master of
engineering.

PERSONAL PROFILE

Date of Birth:	4th Dec 1989
Gender:	Male.
Language(s):	English, Hindi and Gujarati.
Permanent Address:	1/7 jairaj plot, Palace Road, Rajkot-360001,Gujarat,India.
Nationality:	INDIAN.

DECLARATION

I declare that the above information furnished by me is true to the best of my knowledge and will
present an original document whenever asked for.