

Drupad Joshi

drupadjoshi64@gmail.com

Mo: +91 8000010507

Summary:

- A competent post graduate from vector India, Bangalore with more than 2.5 years of experience with convincing expertise on C, Embedded C and Data structures with the cross platform Linux Environment
- Fair Knowledge in operating system concepts
- Strong debugging and problem solving skills in run-time issues
- Basic knowledge in Python, Shell scripting and Makefiles
- Hands on working experience in Yocto and Petalinux build system
- Proficient in using development tools like Github and Jira

Work Experience (2.5+ years)

Softnautics | Designation: **Associate Software Engineer**

[2017 March - 2019 April]

1) **Project:** Xilinx VCU(Video Codec unit)

Description:

- Xilinx Inc.is an American technology company, primarily a supplier of programmable logic devices
- This Project aims to integrate Display ports, Video codec, GPU drivers for Zcu106 Xilinx release board which includes features enhancement, Bug fixing, and functional testing

Hardware Platforms	Xilinx MPSoC: ZCU102, ZCU106, ZCU104, ZCU102
Operating System	Embedded Linux, Ubuntu, Windows
Programming Languages	C, C++(basic), Shell Scripts, python(basic)

Roles and Responsibilities:

- Bug fixing in C in their existing code and file the Jira ticket
- Integrate a build in Petalinux or Yocto on daily basis and boot with Jtag and SD card
- Modification in petalinux build packages like adding QT application support and compile it for target board
- Functional level testing in RDI framework before delivering the code
- Part of CI team for adding new patches in master branch
- Debugging crash and major issues introduced during testing
- Automated the test cases of DP, GPU, VCU in shell scripting
- Conduct weekly meeting to report status of work on Skype

2) Project: Xilinx Memory Leak Detection Algorithm

[2019 April - 2019 June]

Description:

- VCU (Video codec unit) is a module, should be there in all production board of Xilinx
- Frequently hang issues found while Encoding and Decoding the raw video on board in a long run and over-night run
- Observing a huge memory leak with every new add on feature is a serious issue for customers. Every time to debug the whole code with Valgrind and Gdb tools is a time consuming process
- The idea is to develop a memory leak detector or a garbage detector at first stage of the project which tracks the memory allocated by malloc at run-time
- The future goal is to free the allocated memory automatically after work gets finished

Roles and Responsibilities:

- Understand the Code for future enhancements
- Integrating a library with Application which catches the memory leaks

Academics

- Diploma in Electronics and communication from Gujarat Technological university in the year of 2013 with overall 6.3 CGPA
- B.tech in Electronics and communications from Gujarat Technological university in the year of 2016 with overall 6.7 CGPA
- 6 months Post-graduation course from Vector india Bangalore in the year of 2017

Personal Information:

- **Name:** Drupad Joshi
- **DOB:** 23rd March, 1994
- **Languages:** English, Hindi, Gujarati
- **Address:** 90, Sharad nagar society, near Geb, Tarsali, Vadodara – 390009. Gujarat
- **Current Employer:** Softnautics LLP

Character Reference:

1. Samir Bhatt
Manager, Einfochips, Ahmedabad, Gujarat, India
Mo: +91 9714700553
2. Dhaval Shah
Technical Lead, Volansys, Ahmedabad, Gujarat, India
Mo: +91 9909979679

I hereby declare that all the information given above is true to my knowledge

- Drupad Joshi