

Summary:

Management

- Strong knowledge of Agile Methodologies and project management
- Worked as a Project Lead , managed a project while working with Samsung
- Worked as a Team Lead for my previous companies on varying team sizes

Technical

Languages:

- More than 14 yrs of work experience on C/C++ (14 yrs)
- Worked on Java for short duration (1 yrs)
- Knowledge of Perl (0.5 yrs)

Technologies:

- Device driver and Linux kernel programming (More than 3 yrs)
- Device driver and Windows kernel programming (More than 5 yrs)
- Microsoft Foundation classed (MFC) (3 yrs)
- COM/DECOM technology (1 yr)
- QTP programming (1 yrs)
- LabVIEW programming (1 yr)
- Arduino Programming (1 yr)

Frameworks:

- Windows driver Frameworks (WDM and WDF) (5 yrs)
- Android framework (1.5 yrs)

Protocols:

- 802.11 a/b/g/n (4 yrs)
- HID and USB (2 yrs)
- TCP/IP and UDP (2 yrs)

Platforms:

- Anodroid (1.5 yrs)
- Windows ME/XP/Win8 (8 yrs)
- Linux Redhat (2 yrs)

Worked for major IT and product companies

Samsung, Qualcomm, Harmonics, Motorola and Wyse.

Education Background:

- Master of Business Administration (MBA)
First Year: 72%
University: Sikkim Manipal University
Year: 2013
- Master of Technology in Electronics (Computers)
(MTech) CGPA – 8.04
Institute: Govt. College of Engineering (COEP), Pune
University: Autonomous University
Year: 2007
- Bachelor of Engineering in Electronics and Communications (BE)
Percentage – 60 % aggregate
Institute: Army Institute of Technology,
Pune University: Pune University
Year: 1999

Projects Undertaken:

Project Name: Proximity and Ambient Light Sensor Driver and Applications
Client: HTC
Organization: EdigitalCloud
Duration: Jun 2016 to till date
Project Description: This project involves writing device drivers for the new generation optical sensors. Drivers are written for various platforms like snapdragon, MTK, intel etc. phone platforms. Project also involves writing applications to verify the hardware components on evaluation boards. This involves writing software for serial port communication with the devices to configure and verify their functionality. LabVIEW software application is developed to test verify devices during mass production.
Role and responsibility:
- Requirement design and analysis.
- Creating test plan and managing resources.
- Involved in actual coding and development of the feature.

- Designing and Coding as per technical specification.
- Debugging, testing and documentation of the system.

Tools: C, C++, QTP, Linux device drivers, Arduino, LabVIEW, Android, GIT etc.

Project Name: Advance Power Battery Driver

Client: HTC

Organization: HTC Corporation Ltd.

Duration: Jan 2015 to May 2016

Project Description: This is a kernel mode driver for android mobile phone. This driver is for Qualcomm's snapdragon chipset. There are few HTC specific drivers apart from Qualcomm proprietary driver. These drivers are responsible to implement HTC features on the battery driver.

Role and responsibility:

- Requirement design and analysis.
- Project management-Requirement analysis, Project execution plan
- Creating test plan and managing resources.
- Involved in actual coding and development of the feature.
- Designing and Coding as per technical specification.
- Debugging, testing and documentation of the system.

Tools: C, Android, Source Insight 3.5, GIT, Perforce etc.

Project Name: Windows Phone Battery Driver

Client: HTC

Organization: Aricent Group

Duration: May 2014 to Nov 2014

Project Description: This is a kernel mode driver for windows mobile phone. This driver is for Qualcomm's snapdragon chipset. There are multiple driver like battery manager, bms driver and UEFI driver which control different power modules of chip set.

Role and responsibility:

- Requirement design and analysis.
- Project management-Requirement analysis, Project execution plan
- Creating test plan and managing resources.
- Involved in actual coding and development of the feature.
- Designing and Coding as per technical specification.
- Debugging, testing and documentation of the system.

Tools: C, Visual Studio, Windows 7/8, Windbg, Source Insight 3.5, Perforce etc.

Project Name: Multi-Touch Legacy Driver

Client: Samsung Research and Development Institute.

Organization: Samsung Research and Development Institute.

Duration: Feb 2013 to April 2014

Project Description: This is a kernel mode driver for multi touch devices. These touch devices are HID(Human Interface Devices) devices for windows7 and windows 8. The multi touch driver extends the touch in multiple touch screens. When display is extended to multiple screens, this driver extends the touch in multiple screens which matches with the actual display screen.

Role and responsibility:

- Requirement design and analysis.
- Project management-Requirement analysis, Project execution plan
- Creating test plan and managing resources.
- Involved in actual coding and development of the feature.
- Designing and Coding as per technical specification.
- Debugging, testing and documentation of the system.

Tools: C, Visual Studio, Windows 7/8, Windbg, USBLyzer, Perforce etc.

Project Name: Windows Phone 8

Client: Qualcomm India Pvt. Ltd.

Organization: SmartPlay Technologies Pvt. Ltd.

Duration: Oct 2011 to Feb 2013

Project Description: Windows Phone 8 is a windows 8 operating system based mobile phones. The project deals with development of windows wlan driver development. Here Wlan driver is using NDIS 6.3 APIs and Qualcomm Wi-Fi chipset.

Role and responsibility:

- Requirement design and analysis.
- Involved in actual coding and development of the feature.
- Designing and Coding as per technical specification.
- Debugging, testing and documentation of the system.

Tools: C, Visual Studio, Windows 8, Windbg, Code collaborator, Perforce, Trace 32 etc.

Project Name: Notebook 11

Client: Smart Technologies Pvt. Ltd.

Organization: Persistent Systems Ltd.
Duration: Sept 2010 to Oct 2011
Project Description: NB11 is white boarding software which has properties similar as power point with advanced capabilities. The product is platform independent and has a driver which can be used to a whiteboard with system.
Role and responsibility:
- Requirement design and analysis.
- Involved in actual coding and development of the feature.
- Designing and Coding as per technical specification.
- Debugging, testing and documentation of the system.
Tools: C/C++, UnitTest++, Visual Studio, MFC, windows XP, Cairo Graphics.

Project Name: NMX Service Layer
Organization: Persistent Systems Ltd.
Client: Harmonics Inc.
Organization: Persistent Systems Ltd.
Duration: July 2010 to Sept 2010
Project Description: NMX is network management software. NMX used to monitor multimedia streams on the network. The monitoring client is called a Digital Service Manager (DSM) communicates with server called Domain Manager (DM).The original product was designed in VB6. This project involves migration of VB6 to C++ and the re-designing of service layer (Business logic of DSM).All the VB6 to C++ migrated code involves COM/DECOM components.
Role and responsibility:
- Requirement design and analysis.
- Involved in actual coding and development of the feature.
- Designing and Coding as per technical specification.
- Debugging, testing and documentation of the system.
Tools: C/C++, VB6, Visual Studio, COM/DECOM /windows XP.

Project Name: RF WLAN Planner 802.11n
Client: Motorola Inc.
Organization: Persistent Systems Ltd.
Duration: April 2010 to July 2010

Project Description: This is WLAN planner software. The WLAN planner has three products SitePlanner, EnterprisePlanner and LanPlanner. Application of the Wireless Valley LANPlanner and Enterprise Planner software allow engineers to create accurate system designs without a costly and time-consuming on-site wireless LAN survey. LANPlanner and Enterprise Planner are revolutionary computer-aided design, analysis and asset management systems that use either AutoCAD drawings or scanned scale drawings to simulate the RF characteristics of a building or open area. This software has the capability of Predictions, quick AP placement and real time measurements. This product is integrated with RF manager which has drawing export and import functionality. All the above mentioned functionality was already there in the product for 802.11 a/b/g standards. We have added the functionalities for 802.11n standard.

Role and responsibility:

- Requirement design and analysis.
- Involved in high level design documentation.
- Involved in actual coding and development of the feature.
- Designing and Coding as per technical specification.
- Debugging, testing and documentation of the system.

Tools: C/C++, MFC, AutoCAD, Visual Studio, Incredibuild, Windows XP / Vista.

Project Name: WV WLAN Driver Application

Client: Motorola Inc.

Organization: Persistent Systems Ltd.

Duration: Jan 2010 to March 2010

Project Description: WVC Wlan Driver Application is an application which is responsible of collecting information of Access Point in the network. The application makes use of rawEther transport layer driver. The application provides the link (between AP and client) related information to higher level applications.

Role and responsibility:

- Investigation and design analysis.
- Involved in actual coding and development of the feature.
- Designing and Coding as per technical specification.
- Debugging, testing and documentation of the system.

Tools: C/C++, Visual Studio, Windows Xp/ Vista, rawEther.

Project Name: WV Custom WLAN Device Driver

Client: Motorola Inc.

Organization: Persistent Systems Ltd.

Duration: Sept 2007 to Jan 2010

Project Description: Wvc custom wlan driver is an Atheros based wlan device driver. The driver has RF monitoring capability and the MAC layer 802.11n related information collecting capability. The driver can be switched between RF monitoring and normal miniport driver. This driver can support multiple standards like 802.11 a/b/g/n air STD and supports cards from vendors like CACE, D-Link, Ubiquity, Cisco etc. .

Role and responsibility:

- Investigation and design analysis.
- Involved in actual coding and development of the feature.
- Designing and Coding as per technical specification.
- Debugging, testing and documentation of the system.
- Porting 32 bit driver to 64 bit machine.

Tools: C, Windows DDK, WinDbg, Visual Studio, Windows XP/ Vista.

Project Name: Defence ERP management system

Client: Indian Army

Organization: Aura Soft Private Limited, Pune

Duration: February 2007 to August 2007

Project Description: This is a defence ERP management system. Since this is related to Indian Army so project details cannot be disclosed. This project is similar as any ERP management system used in other organizations with concerns on security measures.

Role and responsibility:

- Involved as active member of the development team.
- Involved in design documentation and testing.

Tools:

- Core Java and Servlets
- HTML, Java script

Project Name: Dolphin Entertainment System

Client: International Clients of Babul Technologies Pvt. Ltd. /Zen Solutions Inc.

Organization: Babul Technologies Pvt. Ltd.

Duration: March 2001 to April 2003

Project Description: Dolphin Entertainment System distributes the service to its client (customers) through its network (a cable or some other connection i.e. internet / intranet connection). This system allows the service provider to bill the services provided based on the

movies, songs and news items viewed by the end user and configure the system as per his choice (i.e. home-page, scheme, billing etc). Each end user can take a pick out of the repository of movies, songs and news items available in the database. The latest resources can be added to the database from time to time giving users the maximum choice of the content. Search facility is provided to the user to search in the available resources and choose the items of his choice.

Role and responsibility:

- Involved as active member of the development team.
- Developed the client -server communication module.

Tools:

- C and C++ for the programming required.
- The video codec is taken from open source.
- Network Programming (Socket programming using TCP/IP and UDP protocols).
- Frame buffer to show the graphics menu and the movie playing at the end users.

Project Name: Ad-Hoc TCP/IP

Organization: Babul Technologies Pvt. Ltd.

Duration: Sept 2000 to March 2001

Project Description: This project investigates the effects of link-breakage due to mobility and bit error rate on TCP performance. Through simulation, it is observed that TCP throughput drops significantly when nodes move, due to TCP's inability to recognize the difference between link failure and congestion. So this project proposed a technique which creates a thin transparent layer between transport and IP layer without changing TCP protocol.

Role and responsibility:

- Involved as active member of the development team.
- Involved in bug fixes and testing.

Tools:

- C++ for the programming required.
- Interpreter Language TCL
- NS-2 simulator
- Linux operating system
- GNU plot for plotting graphs

Teaching Experience:

Institute Name: Birsa Institute of Technology, Ranchi

Duration: Nov. 2003 to Dec. 2004