RESUME

Bhooshan Supe

About Myself:

I have good academic qualification with excellent results and seven years of working experience on **Team/**Project **Management**, **Software design** and **Development**.

Being lead software engineer with good understanding on core programming, I am currently involved in **Project estimation, designing, monitoring, evaluating, reviewing, documentation, communicating with clients** and **guiding team members** to ensure a complete and quality business solution is implemented within time.

As a software engineer, I have worked on various projects and gained experience on various **Trolltech** technologies like **Qt, Qtopia** and **QSA** along with **C++, OOPs, Multi threading**, Device driver, System & **Application** S/W under Windows, **Linux** and **VxWorks**.

Experience Summary:

- Total Experience: Seven Years.
- Expertise in most of the Trolltech Technologies **Qt**, **Qtopia**, QSA
- Experience using C, **C++** as programming languages
- Exposure to Linux 2.6 Kernel programming
- Experience using Linux , VxWorks as embedded operating systems
- Excellent team player/leader with good inter-personnel and excellent communication skills

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Experience Details:

- Currently working with Teleca Software, India as a **Team Lead** from Dec 2008 - till date
- Worked with Spartan Labs Pvt. Ltd. Pune India as a **Principle Software Engineer** from Dec 2005 – Nov 2008
- Worked as a Senior Software Engineer with Wipro Technologies from Jul-2005 till Nov-2005.
- Worked as a Software Engineer with Spartan Labs (Pvt) Ltd. from Feb-2003 till Jun-2005.
- Worked as an Associate Software Engineer with Ensoft Informatics (Pvt) Ltd. from Jan-2002 till Jan-2003.Started my career with the same Company as an Embedded Application Trainee.

Education:

Sr. No.	Degree	Major	Year Of Passing	Percentage Gained	Institute	University
3	Bachelor Of Engineering	Mechanical	2001	60.13%	A.I.S.S.P.M.S. College Of Engineering Pune, India	Pune University
2	HSC	Science	1997	78.67%	K.T.H.M. College, Nashik, India	Pune University
1	SSC	General	1995	82.71%	D.D. Bytco Boys High school, Nashik, India	Pune University

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Technical Skills:

Programming Language	C, **C++,** Introductory knowledge of Flex Action Script and Core JAVA
GUI Framework	Qt 2, **Qt 3**, **Qt 4**, WindML 3.0
Application Scripts	QSA (Qt Script for Applications)
GUI Application Suite	Exposure on Qtopia 2, **Qtopia 4,** OPIE 1.2
Compilers	GNU Tool-chain, Microsoft Compiler
Debugging Tools	Gdb, Valgrind
Build System Tools	GNU make, Microsoft nmake
Version Management Tools	CVS, MS VSS, SVN, Introductory knowledge of UCM Clear-Case
IDE	MSVS, eClipse, Tornado
Shell Scripts	UNIX Shell Script
Host Operating System	Linux 2.4 Kernel, Linux 2.6 Kernel, Windows NT4.0/2000/XP
Target Operating System	Embedded Linux 2.6, VxWorks 5.5
Networking Protocols	Introductory knowledge of H323, UPnP and SNMP
Microcontrollers	8051, 89C51RD2
Processor Architecture	X86, ARM
Assembly Language	8051, X86, ARM
Package	Microsoft Office
CAD/CAM	SolidWorks 2000

Other Strengths:

- Very good capability of training people
- Understanding of Linux 2.6 Kernel Programming
- Very good understanding of RTOS concepts

Training Programs Attended:

- Windows Device Driver
- Linux Device Driver
- Core JAVA
- OOAD using UML

International Exposure:

Sr No	Places Visited	Remark
9	Helsinki, Finland	Maemo S/W development project for Nokia
8	Tel-Aviv, Israel	Corporate training of "Qt 4" to IAI
7	San Francisco, USA	MP3 demo project for Encirq Corporation
6	Beijing, China	Corporate training of "Qt 4"
5	Seoul, South Korea	Corporate training of "Qt 4"
4	Sydney, Australia	Onsite integration of ACP project for Avega Systems Pty.
3	Seoul, South Korea	Corporate training of "Qt 4"
2	Puerto Rico, USA	Corporate training of "Qt-VxWorks" to Commoca Inc.
1	Beijing, China	Presentation of “Qtopia 2.2 Over VxWorks 6” feasibility to TrollTech

Qt Trainings Imparted:

Spartan being preferred vendor in Asia of Trolltech. It was required that all corporate trainings that are requested by Trolltech should be imparted by Spartan. Followings are the details of Qt training those are carried out by Spartan

Sr. No	Training Title	Start Date	End Date	Location	Remarks
10	Qt 4.3.3	25-May-08	29-May-08	Tel-Aviv, Israel	All the participants were from Israel Aircraft Industry.
9	Qt 4.3.0	28-Jan-08	30-Jan-08	Pune, India	All the participants were from DRDO ANURAG facility.
8	Qt 4.3.0	15-Oct-07	19-Oct-07	Bangalore, India	All the participants were from Siemens Bangalore, India.
7	Qt 4.3.0	28-Sep-07	30-Sep-07	Noida, India	All the participants were from Cannon Noida, India.
6	Qt 4.2.2	9-Jul-07	11-Jul-07	Bangalore, India	All the participants were from Honeywell Bangalore, India.
5	Qt 4.2.0	5-Mar-07	9-Mar-07	Beijing, China	All the participants were from Beijing University of Posts and Telecommunication, China. Even if Trolltech's office is being in Beijing, this task was assigned to Spartan
4	Qtopia Core 4.2.2	19-Feb-07	21-Feb-07	Pune, India	The participants were from different organizations in India.
3	Qt 4.2.0	29-Jan-07	2-Feb-07	Seoul, South Korea	The participants were from different organizations and universities in South Korea.
2	Qt 4.1.4	6-Nov-06	10-Nov-06	Maysore, India	The participants were from different organizations in India including BARC.
1	Qt 4.1.4	5-Sep-06	7-Sep-06	Seoul, South Korea	The participants were from different organizations in South Korea.

Projects Undertaken:

1. S/W Application Development for Maemo Platform
2. Qt Competency Development In Teleca India
3. Qtopia Commercial Phone Edition 4.2.2 Application Prototype on FT4
4. Automated Meter Reading Prototype
5. Battery Monitoring System
6. Encirq MP3 Player Demo
7. Avega UPnP Control Point Application
8. HP Image-Zone Prototype
9. Video On Demand Application For Set-top Box
10. Qtopia 2.2 Optimization Instrumentation Feasibility Study
11. VSMILE Player Prototype
12. WebC Over WindML
13. VoIP Phone Maintenance
14. Microcontroller Based 3X8 EPABX
15. Handheld Databank Device

Products Undertaken:

1. Qt Over VxWorks
    1. Qtopia Core 4.4.X Over VxWorks 6.Y
    2. Qt-WindML Corporate Training
    3. Qtopia-VxWorks Feasibility Study
    4. Qt-WindML Adaptation Layer for Commoca GUI Utils
    5. Qt-WindML Multiple Application Support
    6. Qt-WindML And Tornado 2.2 Integration
    7. File System Less Qt-WindML
    8. Qt-WindML, Qt 3.1.2 port on VxWorks 5.5.1 using WindML 3.0
    9. Automated Unit Testing Framework for Qt-VxWork
    10. Qt-VxWorks, Qt Embedded 3.0.5 port on VxWorks 5.5

2. Spartan Linux Platform (SLP)
    1. Maintenance of SLP
    2. Spartan Linux Platform Printing Support
    3. Spartan Linux Platform Control Centre
    4. Multimedia Support For Spartan Linux Platform
    5. OPIE 1.2 SH3 Port
    6. Qtopia Open Source Edition 4.2.2 SH3 Port
    7. Qtopia Core 4.2.2 SH3 Port
    8. I/O (LCD, Touch-screen, Keypad) Device Driver Development for Spartan Linux Platform

Details of the projects can be found out in "**Projects Details Appendix**" from page no. 5 onwards in reverse chronological order.

Open Source Contribution:

Inter Process Signal Propagator:

- Developed a Qt (Extension) library using which one can propagate "Qt Signal"s from one process to another even on another machine over TCP/IP. This project is called as "Inter Process Signal Propagator" which can be found at http://code.google.com/p/interprocesssignalpropagator/
- Frees the signal and slot mechanism from both the process and the actual computer. This opens a range of possibilities for Qt applications
- This project has won Qt Centre Programming Contest 2008 (http://www.qtcentre.org/component/qtcentrefrontpage/?task=view&id=111)

Achievements:

- I was selected for DAC in PUNE-ACTS, which is considered to be the best in India. But due to personal interest I have chosen embedded systems as my career.

Professional References:

Sr. No.	Name	Contact Number	Company	Post
1	Pankaj Deshpande	+91-9423507619	Persistent Systems Limited	Senior Consultant
2	Pankaj Khandelwal	+91-9422526687	Persistent Systems Limited	Senior Consultant

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Personal Details:

Name : Mr. Bhooshan Ashok Supe
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[Date] :-
[Place] :- Espoo, Finland **[Bhooshan Supe]**

Projects Details Appendix:

Sr. No.	33
Title	S/W Application Development for Maemo Platform
Product Name	Maemo
Client Company	Nokia, Helsinki, Finland
Vendor Company	Teleca Finland Oy, Espoo, Finland
Description	As a part of services provided by Teleca, Was involved in developing one S/W application (Under NDA) for Maemo platform
Role	Team Member
Responsibilities	Design, Coding, Testing, Debugging, Bug Fixing
Target Platform	N810
Host Platform	Ubuntu 8.10
Skills Set Applied	C++, Qt 4.5.0
Development Tools	Scratchbox
Testing Environment	Onboard manual testing
Team Size	5 Members
Kick-off Date	Mar 2009
Closure Date	Till Date
Duration	NA

Sr. No.	32
Title	Qt Competency Development In Teleca India
Client Company	Teleca India Pvt Ltd, Bangalore, India
Vendor Company	Teleca India Pvt Ltd, Bangalore, India
Description	Under this internal project Teleca India was willing to develop Qt Competency. So we had various simple projects done on various platforms.
Role	Project Leader
Responsibilities	Requirement Specification, Project tracking, Guiding the team technically.
Target Platform	N93, N810, Windows Mobile
Host Platform	Windows XP, Ubuntu 8.10
Skills Set Applied	C++, Qt 4.3.2 for S60 and Linux and Win32
Development Tools	Qt Creator, Carbide, Scratchbox
Testing Environment	Simulator based, Onboard manual testing
Team Size	10 Members
Kick-off Date	Dec 2008
Closure Date	Feb 2009
Duration	3 Months

Sr. No.	31
Title	Maintenance of SLP
Product Name	Spartan Linux Platform
Client Company	Spartan Labs Pvt Ltd, Pune, India
Vendor Company	Spartan Labs Pvt Ltd, Pune, India
Description	As a part and parcel of Spartan's indigenous Linux Platform there was need of maintenance and/or support phase. The responsibility of Linux Kernel and Boot-Loader were assigned to my team.
Role	Team Member
Responsibilities	Bug Fixing, Debugging, Design, Coding, Testing
Target Platform	Spartan Linux Platform (SH3 Based Hardware with Linux Kernel 2.6.14)
Host Platform	CentOS 4, Windows XP
Skills Set Applied	C, Linux Kernel Programming
Development Tools	GNU Tool-Chain,
Testing Environment	Onboard manual testing
Team Size	2 Members
Kick-off Date	July 2008
Closure Date	Nov 2008
Duration	5

Sr. No.	30
Title	Qtopia Core 4.4.X Over VxWorks 6.Y
Product Name	Qt Over VxWorks
Client Company	Spartan Labs Pvt Ltd, Pune, India
Vendor Company	Spartan Labs Pvt Ltd, Pune, India
Description	This project is continuation of "Qt Embedded Over VxWorks" product. This product is resumed to support latest version of Qt/Embedded (Qtopia Core 4.4.0) over latest version of VxWorks (VxWorks 6.5.)
Role	Project Leader
Responsibilities	Requirement analysis, Design, Coding, Debugging, Testing, Effort Estimation, Task allocation, Task Tracking, Client Interaction
Target Platform	VxWorks 6.5 for ARM, Pentium
Host Platform	Windows XP, RHEL4
Skills Set Applied	C++, Qtopia Core 4.4.0, VxWorks 6.5
Development Tools	Workbench 2.6, GNU Tool-Chain, CVS, Bugzilla
Testing Environment	Simulator based, Onboard manual testing
Team Size	3 Members
Kick-off Date	May 2008
Closure Date	Jun 2008 (On-Hold)
Duration	2 Months

Sr. No.	29
Title	Spartan Linux Platform Printing Support
Product Name	Spartan Linux Platform
Client Company	Spartan Labs Pvt Ltd, Pune, India
Vendor Company	Spartan Labs Pvt Ltd, Pune, India
Description	To address handheld market requirement, it was important that printing of application generated documents should be possible. But there was a technical challenge that not every printer can be supported by SLP as not every printer driver can be made available on SLP. So a distributed printing approach is taken, where a printing service is developed on desktop side where actual printing will be carried out and on SLP side a print client developed who will get the printing done using the print service.
Role	Project Leader
Responsibilities	Requirement Analysis, Design, Coding, Debugging, Testing, Effort Estimation, Task Allocation, Task tracking
Target Platform	Spartan Linux Platform (SH3 Based Hardware with Linux Kernel 2.6.14)
Host Platform	CentOS 4, Windows XP
Skills Set Applied	C++, Qtopia Core 4.3.2, Qt Windows 4.3.2
Development Tools	GNU Tool-Chain, Microsoft Visual Studio Express Edition 2005
Testing Environment	Simulator based and Onboard manual testing
Team Size	4 Members
Kick-off Date	Mar 2008
Closure Date	Apr 2008
Duration	2 Months

Sr. No.	28
Title	Spartan Linux Platform Control Centre
Product Name	Spartan Linux Platform
Client Company	Spartan Labs Pvt Ltd, Pune, India
Vendor Company	Spartan Labs Pvt Ltd, Pune, India
Description	To localize various platform specific setting to one place, a component called “Control Centre” is developed. The architecture of this component was plug-in based. Network settings, Audio volume control, LCD brightness, Power management were few plug-ins those were developed initially.
Role	Project Leader
Responsibilities	Requirement Analysis, Design, Coding, Debugging, Testing, Effort Estimation, Task Allocation, Task tracking
Target Platform	Spartan Linux Platform (SH3 Based Hardware with Linux Kernel 2.6.14)
Host Platform	CentOS 4
Skills Set Applied	C++, Qtopia Core 4.2.2
Development Tools	GNU Tool-Chain
Testing Environment	Simulator based and Onboard manual testing
Team Size	3 Members
Kick-off Date	Feb 2008
Closure Date	Feb 2008
Duration	0.5 Month

Sr. No.	27
Title	Multimedia Support For Spartan Linux Platform
Product Name	Spartan Linux Platform
Client Company	Spartan Labs Pvt Ltd, Pune, India
Vendor Company	Spartan Labs Pvt Ltd, Pune, India
Description	To support audio playback it was required that SLP should have some player supported. So few players were considered and MPlayer, qxmp and madplayer were ported.
Role	Team Member
Responsibilities	Requirement Analysis, Testing
Target Platform	Spartan Linux Platform (SH3 Based Hardware with Linux Kernel 2.6.14)
Host Platform	CentOS 4
Skills Set Applied	Unix shell script
Development Tools	GNU Tool-Chain
Testing Environment	Simulator based and Onboard manual testing
Team Size	1 Member
Kick-off Date	Feb 2008
Closure Date	Feb 2008
Duration	0.5 Month

Sr. No.	26
Title	Qtopia Commercial Phone Edition 4.2.2 Application Prototype on FT4
Client Company	Threelinx, Chennai, India
Vendor Company	Spartan Labs Pvt Ltd, Pune, India
Description	To realize Digital Home concept Threelinx was evaluating Qtopia Commercial Phone Edition 4.2.2. Spartan took the task of prototyping multi-user Personal Information Management application on a PXA270 based Finger Tip 4 from Inhand Electronics Inc., USA. Porting of Qtopia 4.2.2 on FT4 was also in the scope of prototyping
Role	Project Leader
Responsibilities	Requirement Analysis, Design, Coding, Debugging, Testing, Effort Estimation, Task Allocation, Task tracking, Client Interaction
Target Platform	PXA 270 based Finger Tip 4 evaluation board from Inhand Electronics Inc., USA
Host Platform	CentOS 4
Skills Set Applied	C++, Qtopia Commercial Phone Edition 4.2.2
Development Tools	GNU Tool-Chain
Testing Environment	Simulator based and Onboard manual testing
Team Size	3 Members
Kick-off Date	Jan 2008
Closure Date	Jan 2008
Duration	1 Month

Sr. No.	25
Product Name	AMR(Spartan Linux Platform)
Title	AMR Prototype
Client Company	Spartan Labs Pvt Ltd, Pune, India
Vendor Company	Spartan Labs Pvt Ltd, Pune, India
Description	To automate meter reading process Spartan was willing to come up with a product. Automated Mere Reading is a complete solution which involves an 8 bit microcontroller based magnetic reader which will get power from SLP and report the reading to SLP. Later SLP will upload the readings to a central server where billing and analysis will be carried out.
Role	Application Team Leader
Responsibilities	Requirement Analysis, Design, Coding, Debugging, Testing, Effort Estimation, Task Allocation, Task tracking
Target Platform	Spartan Linux Platform (SH3 Based Hardware with Linux Kernel 2.6.14)
Host Platform	CentOS 4
Skills Set Applied	C++, Qtopia Core 4.2.2
Development Tools	GNU Tool-Chain
Testing Environment	Simulator based and Onboard manual testing
Team Size	3 Members
Kick-off Date	Dec 2007
Closure Date	Dec 2007
Duration	1 Month

Sr. No.	24
Product Name	Spartan Linux Platform
Title	OPIE 1.2 SH3 Port
Client Company	Spartan Labs Pvt Ltd, Pune, India
Vendor Company	Spartan Labs Pvt Ltd, Pune, India
Description	The applications available in Qtopia Open Source Edition 4.2.2 running on SLP were sluggish. So Spartan has to have another solution for PDA application suite. OPIE 1.2 being fork of Qtopia 2 supposed to be faster. So Spartan took the opportunity to port it on SH3 based hardware.
Role	Team Member
Responsibilities	Requirement Analysis, Reverse Engineering, Design, Coding, Debugging, Testing
Target Platform	Spartan Linux Platform (SH3 Based Hardware with Linux Kernel 2.6.14)
Host Platform	CentOS 4
Skills Set Applied	C++, OPIE 1.2
Development Tools	GNU Tool-Chain
Testing Environment	Onboard manual testing
Team Size	1 Member
Kick-off Date	Nov 2007
Closure Date	Nov 2007
Duration	0.5 Month

Sr. No.	23
Product Name	Spartan Linux Platform
Title	Qtopia Open Source Edition 4.2.2 SH3 Port
Client Company	Spartan Labs Pvt Ltd, Pune, India
Vendor Company	Spartan Labs Pvt Ltd, Pune, India
Description	Spartan was considering SLP, Spartan Linux Platform (SH3 Based Hardware with Linux Kernel 2.6.14) for handheld market. So it was important that one should have PDA application suite available on such platform. To satisfy this requirement Qtopia Open Source Edition 4.2.2 was ported to SH3. Unfortunately the processing power required to run Qtopia was more than SLP can offer and that was the reason that Qtopia applications running on SLP were sluggish.
Role	Team Member
Responsibilities	Requirement Analysis, Reverse Engineering, Design, Coding, Debugging, Testing
Target Platform	Spartan Linux Platform (SH3 Based Hardware with Linux Kernel 2.6.14)
Host Platform	CentOS 4
Skills Set Applied	C++, Qtopia Open Source Edition 4.2.2
Development Tools	GNU Tool-Chain
Testing Environment	Onboard manual testing
Team Size	1 Member
Kick-off Date	Nov 2007
Closure Date	Nov 2007
Duration	0.5 Month

Sr. No.	22
Title	VSMILE Player Prototype
Client Company	V4X Inc, France
Vendor Company	Spartan Labs Pvt Ltd, Pune, India
Description	To realize online TV V4X was willing to develop a RIA which will parse SMILE kind of proprietary VSMILE file and render various media contents.
Role	Project Leader
Responsibilities	Requirement Analysis, Design, Coding, Debugging, Testing, Effort Estimation, Task Allocation, Task tracking
Target Platform	NA
Host Platform	Windows XP
Skills Set Applied	Adobe Flex 2.0, Actions Script 3.0
Development Tools	eClipse
Testing Environment	Desktop based testing using IE and Firefox
Team Size	2 Members
Kick-off Date	Oct 2007
Closure Date	Oct 2007
Duration	1 Month

Sr. No.	21
Title	Battery Monitoring System
Client Company	PPP Pvt, Ltd, Aurangabad, India
Vendor Company	Spartan Labs Pvt Ltd, Pune, India
Description	The system developed was capable of monitoring 2 battery banks consists of 14 groups of 8 batteries. Depending on temperature and voltage of each battery along with various other parameters like hydrogen percentage, oxygen percentages, charging current, discharging current various alarms were generated. A GUI application was developed to display latest status of both the battery banks.
Role	Application Team Leader
Responsibilities	Requirement Analysis, Design, Coding, Debugging, Testing, Effort Estimation, Task Allocation, Task tracking
Target Platform	Spartan Linux Platform (SH3 Based Hardware with Linux Kernel 2.6.14)
Host Platform	CentOS 4
Skills Set Applied	C++, Qtopia Core 4.2.2
Development Tools	GNU Tool-Chain
Testing Environment	Simulator based and Onboard manual testing
Team Size	5 Members
Kick-off Date	Jun 2007
Closure Date	Sep 2007
Duration	4 Months

Sr. No.	20
Title	Encirq MP3 Player Demo
Client Company	Encirq Corporation, San Francisco, USA
Vendor Company	Spartan Labs Pvt Ltd, Pune, India
Description	Encirq Corporation was promoting Device SQL, their embedded database management product, into infotainment market. To achieve this Encirq was keen on developing a “MP3 Player Demo” which will use Device SQL as it database management solution. The player can detect addition and removal of an USB stick as well as it can recognize a shared folder over network. Integration with AMG for MP3 meta data correction, Phonetic search were some of the interesting features. To cater the aggressive deadlines this exercise was carried out in onsite and offshore model
Role	Project Leader
Responsibilities	Requirement Analysis, Design, Coding, Debugging, Testing Effort Estimation, Task Allocation, Task tracking, Client Interaction
Target Platform	ARM 9 based Armadillo Board with Linux Kernel 2.4
Host Platform	Windows XP, Fedora Core 5
Skills Set Applied	C++, Qt Windows/X11/Embedded 4.2.2
Development Tools	Microsoft Visual Studio 2003, GNU Tool-Chain
Testing Environment	Desktop based, Simulator based and Onboard manual testing
Team Size	4 Members
Kick-off Date	Apr 2007
Closure Date	May 2007
Duration	2 Months

Sr. No.	19
Product Name	Spartan Linux Platform
Title	Qtopia Core 4.2.2 SH3 Port
Client Company	Spartan Labs Pvt Ltd, Pune, India
Vendor Company	Spartan Labs Pvt Ltd, Pune, India
Description	Spartan has developed SLP, Spartan Linux Platform, a SH3 Based Hardware with Linux Kernel 2.6.14. To have GUI application it was required that among various GUI frameworks Spartan should use Qtopia Core on SLP. Unfortunately Qtopia Core was never ported to any SH3 based platform Spartan took it as challenge and ported Qtopia Core 4.2.2 on SLP just within a month.
Role	Team Member
Responsibilities	Requirement Analysis, Reverse Engineering, Design, Coding, Debugging, Testing
Target Platform	Spartan Linux Platform (SH3 Based Hardware with Linux Kernel 2.6.14)
Host Platform	CentOS 4
Skills Set Applied	C++, Qtopia Core 4.2.2, SH3 assembly language
Development Tools	GNU Tool-Chain
Testing Environment	Onboard manual testing
Team Size	1 Member
Kick-off Date	Mar 2007
Closure Date	Mar 2007
Duration	1 Month

Sr. No.	18
Product Name	Spartan Linux Platform
Title	I/O Device Driver Development for Spartan Linux Platform
Client Company	Spartan Labs Pvt Ltd, Pune, India
Vendor Company	Spartan Labs Pvt Ltd, Pune, India
Description	Spartan has developed a SH7727 based hardware platform called as SLP (Spartan Linux Platform). Spartan has ported Linux Kernel 2.6.14 for this board. To realize SLP as a handheld device there was a requirement to support LCD, Touch-screen, Onboard Keypad, LCD Brightness controller. To full feel these requirement appropriate device drivers were written
Role	Team Member
Responsibilities	Requirement Analysis, Reverse Engineering, Design, Coding, Debugging, Testing
Target Platform	Spartan Linux Platform (SH3 Based Hardware with Linux Kernel 2.6.14)
Host Platform	CentOS 4
Skills Set Applied	C, Kernel Programming
Development Tools	GNU Tool-Chain
Testing Environment	Onboard manual testing
Team Size	2 Members
Kick-off Date	Jan 2007
Closure Date	Feb 2007
Duration	2 Months

Sr. No.	17
Title	Avega UPnP Control Point Application
Client Company	Avega Systems, Sydney, Australia
Vendor Company	Spartan Labs Pvt Ltd, Pune, India
Description	Avega Systems, Sydney, Australia, has developed a media renderer side extension to UPnP protocol. Using this extension one can manage all the media renderers into various groups. But to do so Avega was in need of customized UPnP control point application. This application was as feature rich as iTunes is. On top of it the GUI was having excellent look and feel and animations. The media contents can be managed in form of a library and the media contents can be sorted and viewed using various criteria like Genre, Artist, Album, Title and Media Source. The integration and system testing was done in Avega's home office in Sydney.
Role	Project Leader
Responsibilities	Requirement Analysis, Design, Coding, Debugging, Testing, Effort Estimation, Task allocation, Task Tracking, Client Interaction
Target Platform	Windows XP
Host Platform	Windows XP
Skills Set Applied	C++, Qt Windows 4.1.4
Development Tools	Microsoft Visual Studio 2003
Testing Environment	Desktop based manual testing
Team Size	7 Members
Kick-off Date	Oct 2006
Closure Date	Dec 2006
Duration	3 Months

Sr. No.	16
Title	Qtopia 2.2 Optimization Instrumentation Feasibility Study
Client Company	Spartan Labs Pvt Ltd, Pune, India
Vendor Company	Spartan Labs Pvt Ltd, Pune, India
Description	Qtopia is a suite of applications for PDAs or mobile phones. But it has considerably large requirement of processing power, memory. So Spartan was wiling to devise optimization instrumentation so that Qtopia can be configured as per requirement to the finest details of feature with a trade off of processing power and memory.
Role	Team Member
Responsibilities	Reverse Engineering, Analysis, Design, Effort Estimation
Target Platform	Linux 2.4 Kernel
Host Platform	Linux 2.4 Kernel
Skills Set Applied	C++, Qtopia 2.2
Development Tools	NA
Testing Environment	NA
Team Size	1 Member
Kick-off Date	Sep 2006
Closure Date	Sep 2006
Duration	1 Month

Sr. No.	15
Title	WebC Over WindML
Client Company	Embedded Software Inc, USA
Vendor Company	Spartan Labs Pvt Ltd, Pune, India
Description	WebC is an embedded web browser by Embedded Software Inc, USA available on Windows and Linux. Spartan took the opportunity to port WebC over WindML to ensure lager market.
Role	Project Leader
Responsibilities	Requirement Analysis, Reverse Engineering, Design, Coding, Debugging, Testing, Task allocation, Task Tracking, Client Interaction
Target Platform	VxWorks 5.5.1 for XScale
Host Platform	Windows 2000
Skills Set Applied	C++, VxWorks 5.5.1, WindML 3.0
Development Tools	Tornado 2.2, CVS, Bugzilla
Testing Environment	Simulator based, Onboard manual testing
Team Size	2 Members
Kick-off Date	July 2006
Closure Date	Aug 2006
Duration	2 Months

Sr. No.	14
Product Name	Qt Over VxWorks
Title	Qt-WindML Corporate Training
Client Company	Commoca Inc, USA
Vendor Company	Spartan Labs Pvt Ltd, Pune, India
Description	As a part of final deployment of Qt-WindML product Spartan Labs was requested to impart onsite corporate training. Four team members of Commoca Inc were trained.
Role	Corporate Trainer
Responsibilities	Imparting Training, Client Interaction
Target Platform	VxWorks 5.5.1 for MIPS
Host Platform	Windows XP
Skills Set Applied	C++, Qt-WindML 3.1.2, VxWorks 5.5.1
Development Tools	Tornado 2.2
Testing Environment	Simulator based, Onboard manual testing
Team Size	1 Member
Kick-off Date	May 2006
Closure Date	May 2006
Duration	1 Month

Sr. No.	13
Product Name	Qt Over VxWorks
Title	Qtopia-VxWorks Feasibility Study
Client Company	Trolltech, Beijing, China
Vendor Company	Spartan Labs Pvt Ltd, Pune, India
Description	One of Chinese customer of Trolltech was interested in using Qtopia 2.2 for some of their 3G mobile phones. These phones were hosting VxWorks 6.1 as an operating system. So being a Qt-VxWorks expert Trolltech carried out feasibility study with Spartan Labs and WindRiver. An on site presentation was carried out to prove the possibility of Qtopia VxWorks port.
Role	Team Member
Responsibilities	Reverse Engineering, Analysis, Design, Effort Estimation, Client Interaction
Target Platform	VxWorks 6.1 for Scale
Host Platform	Windows XP, Fedora Core 4
Skills Set Applied	C++, Qtopia 2.2, Linux Kernel 2.6, VxWorks 6.1
Development Tools	NA
Testing Environment	NA
Team Size	2 Members
Kick-off Date	Apr 2006
Closure Date	Apr 2006
Duration	1 Month

Sr. No.	12
Product Name	Qt Over VxWorks
Title	Qt-WindML Adaptation Layer for Commoca GUI Utils
Client Company	Commoca Inc, USA
Vendor Company	Spartan Labs Pvt Ltd, Pune, India
Description	In their earlier version of VoIP phones Commoca Inc was using Tilcon based GUI Utils (Control Utilities), this GUI Utils layer was an abstraction over Tilcon; And to use Qt-WindML one has to write an adaptation layer that would replace Tilcon. Because of differences in programming model of the two (Qt-WindML and Tilcon) GUI frameworks, it was really challenging to realize the solution.
Role	Project Leader
Responsibilities	Requirement Analysis, Reverse Engineering, Design, Coding, Debugging, Testing, Task allocation, Task Tracking, Client Interaction
Target Platform	VxWorks 5.5.1 for MIPS
Host Platform	Windows 2000
Skills Set Applied	C++, Qt Embedded 3.1.2, VxWorks 5.5.1, WindML 3.0
Development Tools	Tornado 2.2, CVS, Bugzilla
Testing Environment	Onboard manual testing
Team Size	3 Members
Kick-off Date	Feb 2006
Closure Date	Mar 2006
Duration	2 Months

Sr. No.	11
Product Name	Qt Over VxWorks
Title	Qt-WindML Multiple Application Support
Client Company	Commoca Inc, USA
Vendor Company	Spartan Labs Pvt Ltd, Pune, India
Description	Commoca Inc posed a requirement on Qt-WindML (now called SLEEQ), that it should support multiple applications. Being VxWorks 5.5 as an operating system (where due to single shared flat address space multiple processes can not exists) technically it was a quite challenging task. Because Qt Embedded 3.1.2 was designed for Linux kind of operating systems, where multiple processes can be executed with the help of MMU and process management subsystem. To cater this requirement Qt-WindML was modified to support multiple applications at a time.
Role	Project Leader
Responsibilities	Requirement analysis, Design, Coding, Debugging, Testing, Effort Estimation, Task allocation, Task Tracking, Client Interaction
Target Platform	VxWorks 5.5.1 for Scale, MIPS
Host Platform	Windows 2000, Red Hat Linux 7
Skills Set Applied	C++, Qt Embedded 3.1.2, VxWorks 5.5.1, WindML 3.0
Development Tools	Tornado 2.2, GNU Tool-Chain, VLSI, Caging, CVS, Bugzilla
Testing Environment	Simulator based, Onboard manual testing
Team Size	3 Members
Kick-off Date	Dec 2005
Closure Date	Jan 2006
Duration	2 Months

Sr. No.	10
Title	VoIP Phone Maintenance
Client Company	Avaya Telecom, USA
Vendor Company	Wipro Technologies, India
Description	This was a maintenance project of Avaya Telecom's H232 based VoIP Phones. The software used in these phones was divided in 3 main modules Application, Protocol, Operating System.
Role	Application Team Leader
Responsibilities	Bug analysis, Design, Coding, Debugging, Unit Testing, Task allocation, Task Tracking
Target Platform	VxWorks 5.5.1 for XScale, MIPS
Host Platform	Windows XP
Skills Set Applied	C, C++, VxWorks 5.5.1
Development Tools	Tornado 2.2, UCM Clear Case
Testing Environment	Onboard manual testing
Team Size	6 Members
Kick-off Date	Jul 2005
Closure Date	Nov 2005
Duration	5 Months

Sr. No.	9
Title	HP Image-Zone Prototype
Client Company	Trolltech, Oslo, Norway
Vendor Company	Spartan Labs Pvt Ltd, Pune, India
Description	HP was willing to use Qt for their Photo management software, so Trolltech was in need to develop a prototype. Being a preferred vendor of Trolltech Spartan took up this task aggressively and successfully completed. Because of which Trolltech got considerable business from HP. "HP Image Zone" was mostly like Picasa, featured by Chronological, Alphanumeric, Location Based search, etc.
Role	Project Leader
Responsibilities	Requirement analysis, Design, Coding, Debugging, Testing, Effort Estimation, Task allocation, Task Tracking
Target Platform	NA
Host Platform	Windows 2000, Windows XP
Skills Set Applied	C++, Qt 3.3.5 Win32
Development Tools	Microsoft Visual Studio 6, Visual Source Safe, Bugzilla
Testing Environment	Desktop based manual testing
Team Size	3 Members
Kick-off Date	May 2005
Closure Date	Jun 2005
Duration	2 Months

Sr. No.	8
Title	Video On Demand Application For Set-top Box
Client Company	Yume, USA
Vendor Company	Spartan Labs Pvt Ltd, Pune, India
Description	Yume was a startup company willing to develop a Set Top Box based "Video On Demand over TCP/IP" application. This application was featured by on demand video service, on demand weather information, etc. The hardware used was a SA1110 based Equator board. This hardware was featured with dual frame buffer; one to play video and another show application so On Screen Display feature can be achieved. Spartan has modified Qt Embedded to support OSD.
Role	Project Leader
Responsibilities	Requirement analysis Design, Coding, Debugging, Testing, Effort Estimation, Task allocation, Task Tracking, Client Interaction
Target Platform	Embedded Linux 2.4 for SA1110
Host Platform	Red Hat Linux 7
Skills Set Applied	C++, Qt 3.1.2 Embedded/X11
Development Tools	Kate, DDD, GNU Tool-Chain, CVS, Bugzilla
Testing Environment	Desktop based manual testing
Team Size	4 Members
Kick-off Date	Jan 2005
Closure Date	Apr 2005
Duration	4 Months

Sr. No.	7
Product Name	Qt Over VxWorks
Title	Qt-WindML And Tornado 2.2 Integration
Client Company	Spartan Labs Pvt Ltd, Pune, India
Vendor Company	Spartan Labs Pvt Ltd, Pune, India
Description	To realize Qt-WindML as a product Spartan has to integrate it within WindRiver's IDE Tornado2.2. So Spartan has modified Qt-WindML tools (qmake, configure, etc.) so that they would become compatible. Build system, GUI controls were the parts that have been modified in Tornado 2.2.
Role	Team Lead
Responsibilities	Software Requirement Specification, Requirement Analysis, Reverse Engineering, Design, Coding, Debugging, Testing, Task allocation, Task Tracking
Target Platform	VxWorks 5.5 For Scale, MIPS
Host Platform	Windows 2000, Windows NT
Skills Set Applied	C++, Qt 3.1.2 Embedded, UNIX Shell Script, TCL/TK Scripts, GNU Make
Development Tools	Tornado 2.2, CVS, Bugzilla
Testing Environment	Desktop based manual testing
Team Size	2 Members
Kick-off Date	Nov 2004
Closure Date	Dec 2004
Duration	2 Months

Sr. No.	6
Product Name	Qt Over VxWorks
Title	File System Less Qt-WindML
Client Company	Commoca Inc, USA
Vendor Company	Spartan Labs Pvt Ltd, Pune, India
Description	Spartan was to demonstrate Qt-WindML to Commoca Inc, USA, on their VoIP phone. This VoIP phone was a MIPS based hardware. But the there was a restriction that one should neither change the file system and nor its contents So Spartan has to tweak Qt to work without its supportive files fonts, images, etc. and it has to be done quickly. So Qt-WindML was modified to run without file system and the supportive files were part of the binary itself.
Role	Team Member
Responsibilities	Software Requirement Specification, Requirement Analysis, Reverse Engineering, Design, Coding, Debugging, Testing, Task allocation, Task Tracking, Client Interaction
Target Platform	VxWorks 5.5 for MIPS
Host Platform	Windows 2000, Red Hat Linux 7
Skills Set Applied	C++, Qt 3.1.2 Embedded, VxWorks 5.5.1, Linux 2.4 Kernel
Development Tools	Tornado 2.2, GNU Tool-Chain, VLSI, Caging, CVS, Bugzilla
Testing Environment	Simulator based, Onboard manual testing
Team Size	1 Member
Kick-off Date	Oct 2004
Closure Date	Oct 2004
Duration	1 Month

Sr. No.	5
Product Name	Qt Over VxWorks
Title	Qt-WindML, Qt 3.1.2 port on VxWorks 5.5.1 using WindML 3.0
Client Company	Spartan Labs Pvt Ltd, Pune, India
Vendor Company	Spartan Labs Pvt Ltd, Pune, India
Description	This project was an extension of Qt-VxWorks. Qt-VxWorks was having one draw back that one has to add some hardware board specific (LCD, Touch Screen, Keyboard) code changes And WindML is an input and output hardware abstraction layer which was used to resolve this issue. So Qt 3.1.2 was ported on VxWorks using WindML 3.0. StormPad from WindRiver, a SA1110 based board was used as target hardware. VLSI, VxWorks simulator was also used as testing tool.
Role	Team Lead
Responsibilities	Software Requirement Specification, Requirement Analysis, Reverse Engineering, Design, Coding, Debugging, Unit Testing, Test-Plan review, Task allocation, Task Tracking
Target Platform	VxWorks 5.5 for Scale
Host Platform	Windows 2000, Red Hat Linux 7
Skills Set Applied	C++, Qt 3.1.2 Embedded, VxWorks 5.5.1, WindML3.0, Linux 2.4 Kernel, Unix Shell scripts
Development Tools	Tornado 2.2, WindView, GNU Tool-Chain, VLSI, Caging, CVS, Bugzilla
Testing Environment	Simulator based, Onboard manual testing
Team Size	3 Members
Kick-off Date	Mar 2004
Closure Date	Sep 2004
Duration	7 Months

Sr. No.	4
Product Name	Qt Over VxWorks
Title	Automated Unit Testing Framework for Qt-VxWork
Client Company	Spartan Labs Pvt Ltd, Pune, India
Vendor Company	Spartan Labs Pvt Ltd, Pune, India
Description	This project was supportive part of Qt-VxWorks project. To test all non GUI classes Spartan has developed an automated unit test framework using Qt. This framework was in a form of library, This framework was useful for sanity as well as regression testing, generating test reports, etc.
Role	Project Leader
Responsibilities	Software Requirement Specification, Requirement Analysis, Design, Task allocation, Task Tracking
Target Platform	VxWorks 5.5 for Scale
Host Platform	Windows NT, Red Hat Linux 7
Skills Set Applied	C++, Qt 3.1.2 Embedded/Win32/X11, VxWorks 5.5, Linux 2.4 Kernel, Qt 3.0.5
Development Tools	Tornado 2.0, WindView, GNU Tool-Chain, Caging, CVS, Bugzilla
Testing Environment	Simulator based, Onboard manual testing
Team Size	2 Members
Kick-off Date	Jan 2004
Closure Date	Feb 2004
Duration	2 Months

Sr. No.	3
Product Name	Qt Over VxWorks
Title	Qt-VxWorks, Qt Embedded 3.0.5 port on VxWorks 5.5
Client Company	Spartan Labs Pvt Ltd, Pune, India
Vendor Company	Spartan Labs Pvt Ltd, Pune, India
Description	This project was to realize a product concept, Qt VxWorks. Qt 3.0.5, a C++ based cross-platform GUI application development framework was ported on VxWorks 5.5. The porting was done on SA1100 based board named as Panther from Acterna, UK.
Role	Team Member
Responsibilities	Reverse Engineering, Design, Coding, Debugging, Testing
Target Platform	VxWorks 5.5 for Scale
Host Platform	Windows NT, Red Hat Linux 7
Skills Set Applied	C++, VxWorks 5.5, Linux 2.4 Kernel, Qt 3.0.5 Embedded, Unix Shell scripts
Development Tools	Tornado 2.0, WindView, GNU Tool-Chain, Caging, CVS, Bugzilla
Testing Environment	Onboard manual testing
Team Size	4 Members
Kick-off Date	Feb 2003
Closure Date	Dec 2003
Duration	11 Months

Sr. No.	2
Title	Microcontroller Based 3X8 EPABX
Client Company	Stalwart Systems, Pune, India
Vendor Company	Ensoft Informatics Pvt. Ltd, Pune, India
Description	The project involves changing the existing microprocessor (8085) based EPABX system with 8 bit microcontroller for security feature and reducing the total hardware requirement for the digital card of EPABX system. In this project right from the hardware requirement for the Digital Card and providing the interface with the microcontroller is done.
Role	Team Member
Responsibilities	System Analysis, Hardware Interface design, Coding, Testing, Debugging
Target Platform	Philips 89c51rd2 micro controller
Host Platform	Windows-98
Skills Set Applied	C, 8051 assembly language
Development Tools	SPJ cross-compiler, WinISP(PHILIPS), SPJ Term, 8051 simulator
Testing Environment	Simulator based, Onboard manual testing
Team Size	5 Members
Kick-off Date	Jun 2002
Closure Date	Jan 2003
Duration	8 Months

Sr. No.	1
Title	Handheld Databank Device
Client Company	Logman Technologies, Pune, India
Vendor Company	Ensoft Informatics Pvt. Ltd, Pune, India
Description	The project was to develop a compact integrated Handheld databank device. The embedded application is fully "Real - time" in nature. This includes compact system with 2/20 LCD Panel and Alphanumeric touch keypad, Inbuilt flexible file management system, capable of storing 2,000 collection entries, online data entry and calculations, Serial port PC interfaces for downloading and uploading of account details.
Role	Team Member
Responsibilities	Coding, Testing, debugging
Target Platform	Philips 89c51rd2 micro controller
Host Platform	Windows-98
Skills Set Applied	C, 8051 assembly language
Development Tools	SPJ cross-compiler, WinISP(PHILIPS), SPJ Term, 8051 simulator
Testing Environment	Simulator based, Onboard manual testing
Team Size	3 Members
Kick-off Date	Feb 2002
Closure Date	May 2002
Duration	4 Months

Projects Under Training (Ensoft Informatics Pvt. Ltd):

Sr. No.	1
Title	Boiler Temperature Controller
Client Company	Ensoft Informatics (P) Ltd, Pune, India
Vendor Company	Ensoft Informatics (P) Ltd, Pune, India
Description	An embedded temperature controller using AT89C2051 micro controller for sensing the temperature of heating bath. We can set the temperature to be maintained, the two digit seven segment LED will display current temperature
Role	Team Member
Responsibilities	System Analysis, Software Design, Coding, Testing, Debugging
Target Platform	Philips 89c51rd2 micro controller
Host Platform	Windows-98
Skills Set Applied	C, 8051 assembly language
Development Tools	SDCC cross-compiler, WinISP(PHILIPS), 8051 simulator
Testing Environment	Simulator based, Onboard manual testing
Team Size	1 Member
Kick-off Date	Jan 2002
Closure Date	Jan 2002
Duration	1 Month(s)

Assignments Under Training (Ensoft Informatics P. Ltd):

- Simulation of Boiler Temperature Controller on VxWorks.

Academic Projects:

- Designed and Manufactured a Vibration Testing Machine for Ubique Systems (Pvt) Ltd, Pune.