Ankit Shukla **+91 7972628423**
asankitshukla769@gmail.com

Summary:

- 12.8 years of experience in C, C++ on LINUX/WINDOWS/WINCE/QNX based embedded Development.
- Experience in working in C++11/14 features and C++11 multithreading.
- Experience in developing automation tool using python(tkinter).
- Experience in Design Patterns (Singleton, Factory Pattern and Adapter), STL containers, algorithms, and iterators.
- Experience in socket programming, Multithreading, Inter Process Communication, Synchronization and Linux Systems Programming.
- Experience in development tools/IDE (Visual Studio2022, QNX Momentics and QT, SVN).
- Good understanding of Linux kernel internals and Linux Device drivers and Linux Graphics stack.
- Good knowledge on Debugging using GDB, Remote debugging, Kernel Debugging, Performance debugging.
- Good knowledge of Software Development Life Cycle and designing project on requirement.
- Good understanding of design principles (SOLID principles)
- Good understanding of Data structures (Array, Strings, Linkedlist, Stack, Queue, Tree, HashMap, Heap etc.)
- Good understanding of TCP/IP network stack, API Gateways, Distributed systems.

Languages and Tools:

- **Programming/Scripting Languages**: C, C++, C++11, Python, Shell Scripting, Makefile
- **Version Control Tools**: SVN, Git, RTC
- **CI/CD Tool**: Jenkins
- **Repository management tool**: Bitbucket, GIT
- **Issue tracking/Sprint planning:** Jira
- **Requirement management tools:** IBM Rational Doors
- **Debugging Tools**: gdb, Trace32, Lauterbach, Debugging using Visual studio.
- **Design Tool**: IBM Rhapsody, Enterprise Architecture.
- **Unit Testing**: VectorCast, Gmock/Gtest.
- **Operating System**: Linux (Ubuntu, Kali-Linux, OpenSUSE), WinCE7, LynxOS, Windows, AIX and Solaris
- **IDE**: Visual Studio 2019,2022, QDE, QT, Eclipse
- **Standard data interchange formats**: JSON, XML
- **Design Patterns:** Singleton, Factory, Adapter, and builder
- **Data Structure and Algorithm**: Array, String, LinkedList, Stack, Queue, Binary Search tree, Hash, Graph.
- **OS Concepts**: Process Management, Memory Management, Virtual file system, Multithreading, IPCs and synchronization mechanism.
- **Agile/Scrum methodology**.
- **Socket programming, Cross platform product development**.
- **Platforms used**: X86, ARM (Includes GPU and CPU)

Skills with Experience:

1) C (5 years)
2) C++ (10 years)
3) Windows platform (12 years)
4) Linux platform (7 years)
5) QNX platform (3 years)
6) Linux system programming (6 years)
7) IPCs (6 years)
8) Data Structures (10 years)
9) Operating system concepts (8 years)
10) Linux kernel Internals (5 years)
11) Database-SQL (3 years)

Employment Summary:

Duration	Employer
Jan 2023 – Till Now	Veritas technology
March 2019 – Jan 2023	Siemens Technology and services pvt. ltd, Pune
June 2015 – March 2019	Tata Elxsi ltd, Pune
August 2014- June 2015	Infosys ltd, Hyderabad
August 2011- August 2014	Rockwell Collins India, pvt. Ltd, Hyderabad

Project Summary:

Shared licensing component

Team Size	1
Period (Duration)	1 year
Client	Veritas technology
Work Location	Pune, India
Domain	Storage
Language	C++, scripting
Operating System	Windows10, Redhat7, OpenSuse12, AIX7, Solaris11
Tools and compiler	**IDE and Compilers**: Visual studio compiler (Windows), Redhat and OpensSuse (g++) AIX (XLC) Solaris (Oracle Solaris studio) **Repository management Tool**: BitBucket **Issue tracking tool**: Jira **Vulnerability scanning tool**: Black Duck hub
Project Description	Slic is licensing component which is used by all the Veritas products for license handling. Slic uses the external components/libs: Poco and openssl as well. Openssl is used for signature validation and poco is responsible to connect with server for license downloading. Slic validates the installed license files at client side to ensure the security features.
Responsibilities	• Develop new features after requirement discussion/confirmation on Windows platform. • Perform the unit testing on windows. • Port the changes to other platforms Redhat, OpenSuse, AIX and Solaris • Build Poco and openssl library on different platforms and provide the latest slic SDK to product team to fix the vulnerability issues. • Do analysis of found vulnerable issue in openssl and poco to check the impact on slic project.

RBC (Radio block center):

Automation Tools:

RBC Project setup: UI tool which was developed by me to automate the required software installation to make process faster.

Update Baseline and Timestamp: UI tool which was developed by me to update the code baseline and timestamp for all unit testing scripts of all modules.

Team Size	6
Period (Duration)	3.5 years
Client	Siemens Madrid
Work Location	Pune, India
Domain	Mobility
Language	C, C++, python
Operating System	Windows7
Tools and compiler	g++
Project Description	RBC module communicates with the Train system. It receives the position report from Train system. Position is read through Balise devices (fit into Train system). Once the connection is established between train system and RBC, it provides the movement authority to ensure the safety.
Responsibilities	• Develop new features after requirement analysis. • Participate in code reviews. • Analyze the logs and do bug fixing. • Work on Unit testing using VectorCast tool. • Perform static code analysis. • Lead the team of 6 members and resolve technical issues. • Release the billing and update the forecast data for every month.

Project Name: GM Instrument cluster

Team Size	5
Period (Duration)	6 months
Client	Visteon Sofia
Work Location	Pune, India
Domain	Automotive
Language	C, C++
Operating System	QNX, Windows7
Tools and compiler	Qcc, g++, gcc

Project Description	IC project involves processing data from Vehicle processing and sends required data to UI controller. UI controller maps sent data with corresponding UI widgets and required data is shown on cluster. It basically shows the critical data like Tire pressure, fuel data, Tire temperature, tachometer, speedometer data.
Responsibilities	1) Understand the requirements and perform high level and low-level system design. 2) Develop the new features from the given requirements. 3) Perform unit testing using Gmock and Gtest. 4) Work on static code analysis. 5) Work on Unit Testing using VectorCast tool. 6) Participate in code reviews.

Project Name: Applink

Team Size	6
Period (Duration)	3 years, 2 months
Client	Panasonic Automotive
Work Location	Pune, India
Domain	Automotive
Language	C, C++
Hardware	ECUs (Electronic control unit)
Design Pattern	Singleton
Operating System	QNX, Windows7
Tools and compiler	Qcc, g++, gcc
Project Description	App link provides facility to connect your smart phone into infotainment system. It communicates with several modules which are responsible to boot the system and then Applink involves user interaction to take voice commands and UI touch-based input. It provides embedded navigation system as well.
Responsibilities	1) Understand the requirements and prepare the design document. 2) Develop the new features from the given requirements. 3) Participate in code reviews. 4) Analyze the bugs from the logs and do bug fixing. 5) Analyze the core dump. 6) Perform unit testing using Gmock and Gtest. 7) Work on static code analysis.

Project Name: Wince OpenGL call stack porting and Graphics driver development on WinCE platform

Team Size	4
Period (Duration)	**1 year**
Client	AMD

Work Location	Hyderabad, India
Domain	Graphics and multimedia
Language	C, C++
Hardware	Ontario board, Kabini board, Mullins Board
Operating System	Wince 7.0, Ubuntu 13.10**,** Wince 13
Tools and compiler	Visual studio, SVN, Super tool, GCC**,** qt4.8, Makefile
Project Description	Porting Linux graphics stack to WinCE platform and work on Radeon GFX graphics driver to provide the software and hardware rendering mechanism to speed up the performance of driver for videos and gaming platform.
Responsibilities	• Port LLVM OpenGL library for WinCE • Work on development of Graphics driver • Work on defect fixing and driver performance improvement activity. • Work on DRM subsystem and Linux graphics stack porting for wince platform. • Develop graphics application using opengl.

Project Name: Onboard maintenance system

Team Size	20
Period (Duration)	3 years
Client	Rockwell Collins, US
Work Location	Hyderabad, India
Domain	Avionics
Language	C, C++, Python, Shell scripting
Hardware	ARM7
Operating System	LynxOS (Target), Windows (host environment)
Tools	Visual studio, SVN, Doors, Clear quest, PREP, Makefile, Sqlite3, Lauterbach Trace32
Project Description	OMS is a subsystem which includes several applications, and it is responsible to communicate with the LRU (which resides in Aircraft) using ARINC protocols. It provides maintenance data (air indicator, fuel indicator, wires configuration) to Pilot and maintenance people on the request. It communicates to LRU through Ethernet medium and OMS applications communicate using XML RPC calls internally.
Responsibilities	1) Understand the requirements and discuss with partners. 2) Develop the new features from the given requirements for • Diagnostic Report Application (DRA) • Display Manager Application (DMA) 3) Perform functional and Unit Testing. 4) Work on bug fixing.

Academic Summary:

Course	Institution/University	Year	Marks
Diploma in system software	Pune University	2011	65%
B. Tech	UPTU	2010	74%
Intermediate	U.P. Board	2005	71%
High School	U.P. Board	2003	69%

Personal Data:

Name : Ankit Shukla

Father's Name : H.S. Shukla

Date of Birth : 22-Jun-1988

Languages known : English and Hindi