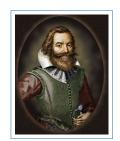
Vishal Vishal

Curriculum Vitae

Cottastrasse 3 Stuttgart, 70178 (+49) 176 47131895 ⋈ vishalaries88@gmail.com



Profile Summary

An accomplished software developer with 5.2 years of experience in the field of embedded and real time critical software systems using C/C++ as high-level languages. Expertise includes software development using OOP/OOAD, data structures, design patterns, and SDLC techniques, implementing and improving complex workflows in a time critical environment, enhancing the code quality for optimization and robustness and in-depth knowledge of AGILE scrum based methodology. Highly motivated to work in a team or a self managed project.

Technical Skills

Programming C,C++(with STL and Boost), Python Languages Tools Jenkins, Jira, Git, CMake, GDB, CANUtils Frameworks ZMQ, Protobuf, GoogleTest, GMock **OS** Platforms Linux, QNX Automation Sikuli, Robotium, Appium Framework **IDEs** Visual Studio, Eclipse, QTCreator **Protocols** TCP/IP,CAN,RS232,RS485

Experience

Jan-2016 – **Software Developer(Embedded)**, Roche, Stuttgart.

- Present Developed and maitained driver for Motion control boards based on CANopen.
 - Created a micro-service to use the motion control boards as part for a real-time development framework for medical devices.
 - o Implemented complex workflows in medical devices for lab automation.
 - Responsible for testing the code quality and reviews.

Aug-2015— Junior Researcher(Student), Fraunhofer SIT, Darmstadt.

- Oct-2015 Explored the area of software obfuscation specifically for Java, JavaScript, and Python.
 - o Implemented a new obfuscator(Java) by combining existing obfuscators and evaluated it against the existed techniques for a research project.

- Aug-2014- Software Test Engineer(Student), DEUTSCHE TELEKOM, Darmstadt.
 - Aug Developed a model based(using PyModel) test suit framework for mobile handheld devices like e-reader, tablets and mobile phones using the Sikuli framework.
 - Writing test cases using Roboitum and Appium interface.
 - Indulge in manual testing and reporting bugs on Redmine for Android applications and e-reader devices
- Aug-2014— Junior Reasearch Assistant(Student), Technical University Darmstadt, Aug Darmstadt.
 - 2015 Investigated supervised and unsupervised learning techniques using semantic analysis to develop an algorithm for finding a coherent set of documents.
 - Implemented a clustering technique for initial filtering of documents from a large corpus(New YorkTimes data-set).
 - Implementing existing approaches and real user evaluation.
 - Enhanced existing algorithm for document semantic matching using **NLP** techniques.
- Aug-2012- Lead Engineer, Samsung, Bangalore (India).
 - Sep2013 Real Time WiFi Traffic Generator
 - Explored the various traffic modeling parameters for the different type of video streaming traffic.
 - Involved in research and scope estimation of the project.
 - Implemented algorithm for parsing raw packets flowing on the networks in C++.
 - Responsible for network level communication algorithm for different traffic using sockets library
 - Implemented the software for generating different traffic models for a different parameter.
 - Ensured the software quality by unit tests and functional testing of the modules.
 - Test tool development for SIPC conformance
 - Understanding the API to interact with an application processor and the communication processor.
 - Understanding proprietary protocols for Samsung inter-process communication.
 - Ensured the protocol by writing units tests using **JUnit**.
- Mar-2010- **Software Engineer**, SASKEN TELECOMMUNICATION PVT. LTD., Bangalore Aug-2012 (India).
 - Windows Multimedia (Video)
 - To perform the unit testing for the fixes.
 - To perform the real time debugging using windows debugger and analysing the logs and finding the root cause for the issue.
 - Development and integration of algorithms to improve the decode times for frames(MPEG-4,H264) in C++.
 - Handled issues in video decoder module in windows Media Foundation framework using
 - o Audio DSP subsystem on mobile platform Sustenance and Maintenance
 - Performing Root Cause Analysis (RCA) by analysing the logs obtained during real time use case and fixing the errors raised by various teams during different stages of **SDLC**.
 - Responsible for fixing issues in Audio-Data(amr,mp3,3gp) Processing module in DSP application software written in **C**.
 - Involved test automation using Nokia testing tool ATS3 and AT Commands.
 - Responsible for writing automation scripts in **python** of Nokia head phones.
 - Involved in **Agile** methodology (**Scrum**).
 - Involved in documentation of the call flow and design requirements of automated test tools

Education

2013–2015 **Distributed Software Systems**, Masters of Science, Technical University Darmstadt, Darmstadt (Germany).

2005–2009 **Computer Science and Engineering**, Bachelor of Technology, Kurukshetra University, Kurukshetra (India).

Masters Thesis

Title Storytelling: Finding the coherence between large set of documents

Description This thesis explored the domain of **Text Mining** and **Natural Language Processing** to find the most coherent news articles from a large set of NewYork Times corpus.Impelementaion of this thesis is done in **python**. Apache **Solr** server is setup and queried for accessing the dataset.

Packages used: **Python**(nltk, math, os, string, numpy, pulp,time, pysolr, urllib2, json,sklear,scipy)

Languages

Hindi Mothertongue

English **Fluent** Fluent

Deutsch Basic A2