## **PAVAN PONGLE**

# **C++ Software Developer**



### About me

From last 9 years I am working in C++ application development in Cyber security, HFT and PLM & CAD domain. Mostly, I worked on C++ and related tools but also small part of experience is on C#, Java and web technologies. I have build expertise in multithreading, meta-programing, UI designing and high-performance C++ coding. And I have good understanding & interest in parallel programing and system programming. I am Highly motivated and quick learner.

- Github repo link
- **Leetcode profile link**

### Skills

- o C++ 11/14/17/20
- Standard template library (STL)
- QT, Boost, Curl, ProtoBuf, Zlib, nlohmann json, Openssl etc. libraries.
- o Data structure & Algorithms
- Multi-Threading
- Lock-free programming
- Template Programming
- System programming with Windows API and POSIX API
- IPC like Socket, Pipe, Shared memory
- Advanced Design Patterns
- o Git, Perforce SCM
- Python, shell & Batch Scripting
- CMake, Make, Boost & MSBuild build system
- Micro benchmarking
- Junit, Gtest etc. unit test framework.
- Valgrind, GDB, TSAN, Dr Leak etc. other memory leak & thread deadlock detection tools for windows and Unix platform.
- WIX and advance installer for windows and Unix application installer.
- C# Java Javascript HTML
- Xamarin framework
- SQL and Database

## **Experience**

#### MEMBER OF TECHNICAL STAFF III

Colortokens India LLP. 2.9 Years Oct 2021 – Jul 2024

Contributed in agent software development, which is developed for multi-platform like Windows, Linux, AIX, Solaris, and Mac. Tasks like, packet capturing, analyzing, and reporting to server via REST API, Firewall rule programming. Also, have work on maintaining installer for same. Worked on POC project to support agent on win32, RHEL & Solaris like platform. In 3.0 agent, log enhancement, contributed major role in C++ design & code review.

Skills utilized: C++17, micro benchmarking, Make & CMake build tools, Boost, Curl, zlib, Shell script, IPC, WIX and Linux installer, analysis of memory leak, core/crash dump and high CPU usage, Windows API and POSIX API. Build time optimization.

#### **SENIOR SOFTWARE ENGINEER**

FIS Solutions Pvt. Ltd. 2 Years Oct 2019 - Oct 2021

Contributed in order routing module from proprietary trading software. The module was responsible to communicate with exchange over the socket, decode and encode trade/order/exchange message to and from exchange communication protocol. Written unit tests and exchange simulator for KRX/KRUSG/SEHK/ASX. Worked with more than 5 APAC exchange and on their native/standard protocols.

Skills utilized: C++14, Boost build, Boost lib, Python script, IPC, Socket programming, gtest framework, core/crash dump analysis.

#### **SOFTWARE ENGINEER**

HCL India Pvt. Ltd. 1.3 Year Jul 2018 - Oct 2019

Worked on Teamcenter (PLM suite) In C++ development and writing unit tests. Skills utilized: C++ and Junit test framework
Skills utilized: C++98, Perforce, junit test framework.

#### **SOFTWARE ENGINEER**

Prototech Solutions Pvt. Ltd. 2.8 Year Sep 2015 - Jul 2018

Pune University Distinction

2013 - 2015

Katera visualizer an iOS app developed in Xamarin for visualizing IFC file with help of xBIM toolkit and webGL. Done shader programming for Billboard implementation.

Inspection Xpert 2.0, developed in C++ QT, along with used pdf and 3D file rendering libraries, and Excel API.

Inspection Xpert 1.0, developed in C# with DevExpress, Excel API

Skills utilized: C++11, QT library, C#, Js, HTML, CSS, Xamarin framework, WebGL.

### **Awards**

- a. Quarterly champion award, Q4 2023, in Colortokens for fast brining up of Solaris Agent.
- b. Budding star, towards dashing contribution in Colortokens in Aug 2022.
- c. Recognition in FIS for writing exchange simulator for KRX & KRUSG exchanges, in 2019.

## **Educational background**

MASTER's in COMPUTER NETWORKS.

Research Paper Publication in IEEE Jour	rnal 2015 On IOT	8.7 CGPA	
BACHELOR's in COMPUTER ENGINEERING	<b>G</b> Pune University	First Class	2008 - 2013
HIGHER SECONDARY SCHOOL	Maharashtra State Board	76 %	2006 - 2008
SECONDARY SCHOOL	Maharashtra State Board	80 %	2005 - 2006