



# Gurpreet Singh

Software Architect - C++ Developer-  
EU Blue Card Holder

## Profile

Creative, results-oriented software enthusiastic with over 13 years of experience in designing, writing and testing programs in the complex High Tech Embedded, Automotive, Defence & Security software development. Technically proficient in modern C++, Object-oriented Analysis and Design with good holds on Algorithms, Design Patterns and Software Engineering.

## Employment History

### Software Designer at KPIT Technologies, Munich, Germany

May 2019 — Present

- Hands on experience in C++ 11/14 development, Design Pattern & TDD for automotive feature development in the area of ADAS.
- Developing ACC(Adaptive Cruise Control) ADAS feature, to slow and stop at a traffic light without the driver touching the brake pedal.
- Integrate Map interface with Camera Data to provide crossing information.
- Applied and remained current with existing and emerging C++ language features.
- Experience with Continuous integration systems (Git, Jenkins) processes.

### Technical Consultant at GlobalLogic, Noida, India

September 2016 — May 2019

- Design and development of System Monitor Agent using C++ and Design Patterns for local and remote log data collection.
- Implemented Real time File Monitoring feature for monitored files.
- Resolved various performance bottleneck for the product by implementing performance efficient C++ algorithms and solutions.
- Setup Continuous Integration systems (Git, Jenkins) to build software for different \*Nix variants.
- Part of Tier IV team, earned lots of appreciations from SIEM end users for providing hot fix on production bugs and resolving technical issues.

### Project Lead at RTTS (Real Time Tech Solutions), Noida, India

June 2012 — August 2016

- Design and development of complex embedded systems with C++.
- Provide software libraries, solutions and framework to different teams.
- Developed BDF - Bridge Definition framework to provide a fast and uniform development of various bridge modules.
- Developed Sensor Receiver modules using C++ for various sensors ESM, NC and Sonar sensors using C/C++, DDS and QT.
- Prepared UML diagrams & class diagram to capture system requirement in discussion with customer.
- Coach, guide and mentor new customers to work on DDS.
- Part of sales team to execute POC's for winning new customers.

## Details

Munich, Germany,

Phone: +49 1 51 2900 0539

[gurpreet2804@gmail.com](mailto:gurpreet2804@gmail.com)

[nandagurpreet@gmail.com](mailto:nandagurpreet@gmail.com)

## Links

[LinkedIn](#)

## Skills

C++ 11/14

C++ 17

Data Structures & Algorithms

TDD

UML & SysML

GIT, Jenkins, JFrog Artifactory

OOA/OOD & Design patterns

QT ToolKit

GO Lang

IPC, Synchronisation and  
Multithreading

DDS (Data-Distribution Service),  
Open Splice Tools

IBM Rational Rhapsody

VxWorks & Wind River Tools

Logrhythm - SIEM

## Languages

English

German - Beginner

## **Technology Analyst at Infosys Technologies Ltd, Chandigarh, India**

August 2010 — November 2011

- Developed Parser tool for DowJones to extract data from companies financial results.
- Designed tool architecture and source code with C/C++, prepared tool design document, Use cases, Activity/Sequence diagrams using UML .
- Lead team of 6 people and managed daily task and progress.

## **Sr. Software Engineer at Sopra India Pvt. Limited, Noida, India**

May 2010 — August 2010

- Involved in requirement understanding for Airbus fuel controller module.
- UML Modeling: Use cases, Activity diagram Sequence diagrams and State diagrams to capture functional and non-functional requirements.
- Involved in development of fuel controller with C++.

## **Software Engineer at Jangoo Tech on contract for WESEE, Ministry of Defence, New Delhi, India**

February 2007 — May 2010

- Developed Map application and Categorization software module using C++ & VxWorkrs - API's.
- Done portability of the code from host machine i.e. a Sun -Workstation to target machines running on VxWorks.
- Used Tornado –Tool chain (GDB Crosswind Debugger, Wind View) for code debugging performance/memory monitoring.
- Documentation: User Manual, CDD, Acceptance Test Procedure (ATP) Document

## **Education**

**Bachelor of Technology , Electronics & Communication, Kurukshetra University**

2001 — 2005

## **References**

References available upon request

## **Courses**

**PGDEVD, CDAC, Noida**

February 2006 — August 2006