Rajat Kant Singh

Senior Member of Technical Staff, Oracle

rajatkant@live.com
(+91) 9818764682

An accomplished Software Engineer specializing in Object-Oriented Development with work experience of 7 years in full life cycle of Software Development and application deployment in Cloud Native Environment.

PROFILE SUMMARY

- Multilayered development expertise in Scalable and High Performance Object-Oriented Systems.
- In-depth knowledge of C++ Programming with STL and Multi-threading.
- Good understanding of Algorithms Design and Data Structures.
- Significant contributions to DevOps and in transitioning softwares from monolithic to microservice.
- Excellent ability to grasp emerging technologies and interact effectively with team and clients.

TECHNICAL PROFICIENCY

Languages	C++, Java, Go, Perl, Python, Bash Scripting
Web Basics	PHP, SQL, JavaScript, HTML, CSS.
Technologies	5G NR, LTE EPC, Microservices, Database, Containers.
Software/Tools	Git, Bazel, ClearCase, Make, GCC, MySQL, Microsoft Office, Adobe Photoshop.
DevOps/Cloud	Kubernetes, Docker, Jenkins, Grafana, Prometheus, Jaeger, Elastic Stack.

PROFESSIONAL EXPERIENCE

ORACLE   **Sep 2016 - Present**
Senior Member of Technical Staff

One of the select few to kick-start 5G Project. Bagged a lot of appreciation for enabling team into adapting modern development methods and delivering superior products than competition. Awarded rising star for innovation and quality of work delivered.

Projects and Job Responsibilities

Service Communications Proxy
- Leading development of 5G aware proxy worker component built on top of open source applications.
- True microservice architecture and cloud native deployment.
- Enabled priority routing and congestion control for 5G NFs.
- Introduced mediation services in SCP.

Diameter Security Application
- Primary developer of application to detect security vulnerabilities in Diameter Core Network.
- Learned Perl and used it as main development language.
- Familiarized self with Web basics for interface design, JSON for data exchange and Python for automation.
- Worked on identifying performance bottlenecks and improving on them.
- Reviewed code for bug fixes and enhancements in subsequent releases of application.

ARISTOCRAT TECHNOLOGIES   **June 2016 - Sep 2016**
Software Engineer 2

Worked only for a few months but adapted quickly to the new environment of slot game development and started delivering quality work in no time.

Projects and Job Responsibilities

Multiple tiny projects
- Worked with team in porting slot casino games developed for one market to another market.
- Pure Agile development aided with software like Jira.
- Debugged few issues with the help of gdbserver.

ARICENT TECHNOLOGIES **Aug 2013 - June 2016**
Senior Software Engineer, Development

Managed the complete life cycle of software development from analysis of the client requirements to field support and documentation. Analyzed application and platform issues, reviewed some designs and participated in code review. Rated Extraordinary Performer in Annual Reviews.

Projects and Job Responsibilities

Policy and Charging Application
- Implemented Charging functionality in Policy Diameter Routing Agent above the Diameter Stack. Diameter is an AAA Protocol used in LTE EPC.
- Created database to store charging related information such as session ID, charging client ID, etc.
- Written APIs for database operation and implemented core signaling functionality in C++ language.
- Agile methodology was adopted and each iteration was delivered well in time with excellent quality.
- Other responsibilities included automated unit testing using CppUnit and PHPUnit framework.

Gx Session Limiting Feature
- Implemented Gx Session Limiting Feature for Policy Application.
- Existing core signaling functionality of the application was modified and new functionality was added along with addition to Database and APIs.
- Participated in related code reviews and decision-making process.
- Feature Presentation to TAC Team.

Sustaining Development
- Investigated and resolved complex product code defects reported at deployment sites.
- Ensured customer satisfaction by providing technical know-how and resolving customer queries.
- Provided software patches and written patch deployment scripts for customers like AT&T and Verizon.
- Prepared Method of Procedure for patch deployments and assisted the deployment of patch over a cluster of hundreds of live diameter nodes processing millions of messages per second without any service impact.

Network Analyzer
- Implemented a network analyzing tool for checking network configuration and monitoring network activity as a part of training program at Aricent. Displays routing tables, interface statistics and connection information supporting multiple options.
- Documented the Requirements, HLD, LLD, Code and Quality Assurance. Implemented in C language.

EDUCATION

Bachelors of Technology in Computer Science **2009-2013**
HBTI Kanpur

Achievements and Projects
- Member of the Technical Cell in Computer Science Department, HBTI Kanpur
- Studied and implemented authorization and key management schemes in IEEE 802.16j Networks.
- Implemented Online Shopping Cart using PHP and MySQL.
- Linux From Scratch and Beyond Linux From Scratch (Independent Study)

PERSONAL DETAILS

- **Date of Birth**   24 August, 1989
- **Sex**   Male
- **Nationality**   Indian
- **Permanent Address**   800, Pashchimpuri, Agra, UP, India (282007)