KARTHIKEYAN KRISHNAMOORTHY

1330 Valley Lake Drive • Schaumburg, IL 60195 • (847) 915-0346 • [karthiknk81.career@gmail.com](mailto:karthiknk81@gmail.com)

**SUMMARY**

**Performance Architect** with **over 15 years** of extensive experience in design, develop, evaluate and deploy high performance, high scalability, highly available, reliability, and resilient architectural solutions for large scale commercial software applications, for Fortune 500 companies in the Banking, Telecom, Financial, Insurance and Healthcare sectors.

**CORE COMPETENCY**

|  |  |
| --- | --- |
| ♦ Performance, Scalability & Availability Engineering | ♦ Site Reliability Engineering (SRE) |
| ♦ NFR Engineering: SLO, SLA, SLI & Performance budgeting | ♦ Workload Analysis & Simulation Modeling |
| ♦ Early PT enablement, Static & Dynamic code profiling | ♦ Time & Space Complexity - Growth Analysis |
| ♦ Web&App Server /JVM– Performance optimization | ♦ JVM, VM, OS – Performance optimization |
| ♦ DB (SQL, Index, Partition) - Performance optimization | ♦ OS (Unix/Windows) – Performance analysis |
| ♦ IBM PureApp, Power 7/8, AIX Virtualization - optimization | ♦ Knowledge in Datacenter & Private Cloud |
| ♦ AWS & Azure – Migration & Capacity planning experience | ♦ Strong Java & J2EE development experience |
| ♦ Team management, Leadership, and Mentoring | ♦ Trend & Statistical Analysis |
| ♦ Excellent communication, presentation and organizational | ♦ Basic understanding of Machine Learning & AI |

**TECHNICAL SKILL**

♦ **Programming**: Java/J2EE, C, Python, Bash Shell & Perl ♦ **OS**: Unix, Linux & Win ♦ **Framework:** Spring, Hibernate/JPA ♦ **Database**: Oracle, DB2 & MongoDB ♦ **Dev/Build Tools**: Eclipse, Maven, JUnit & GitLab ♦ S**OA**: ESB, SOAP, RESTful ♦ **Web/App Server**: WebSphere, JBoss, Tomcat & WildFly ♦ **Cloud/Virtualization:** Azure, AWS & IBM AIX

**PERFORMANCE TOOLS**

♦ **APM & Monitoring Tool:** IBM Tivoli, dynaTrace & HP BAC ♦ **PT Software:** HP Load Runner and JMeter

♦ **OS Native Tools:** vmstat, mpstat, top, topas, nmon, netstat, perfmon ♦ **Database:** Explain Plan, AWR, ADDM /ASH

♦ **JVM Tools:** JMC, VisualVM, jStat, GCAnalyzer, Thread & Heap Analyzer ♦ SOAP UI, Selenium, ELK & Splunk

♦ **Diagnostic Tool:** JProfiler, HP Diagnostic, HTTPWatch, Fiddlier, WireShark

**EDUCATION**

**Master of Computer Application 2001 - 2004**

Annamalai University, Tamilnadu, INDIA

**Bachelor of Science, Computer Science 1998 - 2001**

TBML College, Tamilnadu, INDIA

**PROFESSIONAL EXPERIENCE SUMMARY**

**Sr. Performance Architect July 2019 - Present**

Capgemini, Bloomington, IL USA

* Performance, Scalability, Availability & Resiliency Engineering consulting for new Multi-Cluster deployment topology
* Develop & establish a streamlined, systematic performance evaluation process which is suitable for Agile Methodology and enables early performance testing
* Interacted with the Business Analyst and application teams to discuss the performance requirements and load test strategy; provide guidance & support to performance testing team, simulation model design
* Evaluate technologies, make recommendations on technical choices, and work cross-functionally to gain consensus on design.
* Partnering with application and architecture team to review requirements, identify the area of performance concerns, review architecture, design, code-review to eliminate performance risk
* Consulting for Resilient, Fault Tolerant, Highly Availability (MTTF/MTTB) Multi-Cluster design & development

**Performance Architect Dec 2018 - July 2019**

Cognizant Technology Solutions, Deerfield, IL USA

History

**♦2014 – 2019:** Architect – Technology, Cognizant US Corp.

**♦2011 – 2014:** Technology Specialist, Cognizant US Corp.

**♦2008 – 2011:** Sr. Development & Performance Engineer, Cognizant INDIA Corp.

* Work closely with application and architecture team to review requirements, identify the area of performance concerns, review architecture, design, code-review to eliminate performance risk
* Evaluate technologies, make recommendations for technical choices, and work cross-functionally to gain consensus on architectural design.
* Ensure the next generation of applications are optimally tuned for its optimum performance and scalable requirement before production deployment
* Identified system performance requirements based on customer usage patterns and batch schedule/ load pattern
* Provide support to PT and PE team to design, build and test production like load simulation
* Communicate performance risks and mitigation plan to management, application and architecture team
* Provide inputs and enable performance engineering team on best practices as to profiling, optimizations, identifying code bottlenecks, database optimizations, memory analysis, modeling performance
* Understand customer performance issues in production, identify the performance risks and suggest monitoring and mitigation of issues
* Actively involve and lead production outage restoration, root cause analysis, diagnosis and provide solutions to customer production performance issues
* Periodic consulting with RunOps and Monitoring Team to implement effective proactive monitoring and alerting set up for the production environment
* Production SWAT/SoS Support
* Capacity planning and forecasting analysis using USL & Regression analysis

**Lead Developer** **|** Associate Consultant **Feb 2008 - Dec 2008**

Merrill Lynch (INDIA) Technology Services, Chennai, INDIA

**Technology:** Java SE, J2EE, Spring Framework, Apache POI, Hibernate, Oracle 11g, WebLogic and UNIX

* Accountable for the detailed design, coding, unit testing, implementing, maintaining, and supporting applications software. Serves as a point person for addressing issues and enhancements related to the specific product, functional, and technical area.
* Involved in Business Analysis and developed Use Cases, Program Specifications to capture the business functionality.
* Improved the coding standards, code reuse, and performance of the Extend application by making effective use of various design patterns
* Involved in designing and developing dynamic web & app using JSPs, Servlets, JMS, JPA and Spring Framework. Designed application using Process Object, DAO, Data Object, Value Object, Factory, Delegation patterns, SOAP and RESTful.
* Designed and developed Class diagram, Identifying Objects and its interaction to specify Sequence diagrams for the System using Rational Rose. Client-side validations are done using JavaScript
* Provide necessary support to functional testing during QA cycle, support production rollout and maintenance support

**Sr. Developer |** Programmer Analyst – Level 3 **Dec 2006 - Jan 2008**

ExcelaCom Technologies, Chennai, INDIA

**Technology**: Java Core & EE, Century Framework, ServiceMix ESB, EJB, Java XML API (SAX & DOM), Hibernate, Oracle 9i, JBoss Application Server and UNIX Platform

* Participate in requirement gathering meeting with customer, management and architecture team and BRD/DDR/FRD document development activities
* Accountable for the detailed design, coding, unit testing, implementing and support maintenance
* Support function testing, production rollouts and bug-fixing
* Developed user interface screens using JSP, HTML, CSS, JavaScript, AJAX and JSP Custom Tag.
* Develop XML Processors using SAX/DOM APIs and develop schema validation using SAXParser
* Develop integration components using Enterprise Service Bus (ESB)
* Develop asynchronies message processing components using JMS API

**Developer |** Project Engineer  **Aug 2004 - Dec 2006**

Polaris Software Lab. Ptv. Ltd., Chennai, INDIA

**Technology**: Java Core/EE, JSP, Servlet, EJB, PL/SQL, C, PRO\* C, HiRDB, Apache Xersos/Salon APIs, Apache Tomcat and RedHate Linux Platform

* Enterprise application development for specifically for Core Banking domain
* Customize and deploy banking core product for specific banking customer need
* Application module development as per assigned FRDs, build, unit testing and
* Support System testing, Integration testing, production deployment, Functional & Production bug fixing and support
* Develop user interface screen using JSP, HTML, CSS, Java Script
* Develop business rules and logics using EJB, Hibernate, JMS & MQs
* Develop backend logic using ORM APIs, SQLs & PLSQLs
* Develop backend EOD jobs using Pro\* C