

Rohan Tiwari

Senior Software Engineer

Summary

Interest areas: Distributed systems and services, big data, search/index, machine learning, statistics, data visualization and object oriented program design.

Experience

Senior Software Engineer, Azure at Microsoft

January 2015 - Present

Azure SQL Data Warehouse:

- > Leading the team on building large scale map reduce based big-data applications, data visualization dashboards and RESTful ASP.NET cloud services with an emphasis on identification of outlier/regressed customer behaviors/experiences.
- > Defining reliability and availability goals, and measuring attainment for the Azure SQL Data Warehouse product.
- > Worked on streaming external data (from HDFS, Azure Blob etc) directly into SQL Server instances running on compute nodes that are part of Azure SQL Data Warehouse MPP cluster resulting in much faster and scalable big data imports into the system.

Azure Capacity Management:

- > Led the development of globally distributed REST based micro services on Azure to manage service limits in near real-time using capacity prediction models.
- > Designed big data processing pipelines in Java, Hive and Oozie to analyze customer spend and resource usage in Azure using Azure HdInsight as the compute engine and Azure Data Lake as the big data store.

Technologies/Tools: C#/.NET, R, SQL, Azure Storage, Azure Data Factory, Azure ML, Azure Search, Azure Data Lake, JSON, REST and Hadoop/Hive.

Software Engineer III, BIG-IQ at F5 Networks

February 2014 - January 2015 (1 year)

I was the first developer on the platform services team contributing to the BIG-IQ product. I led the development of REST based service endpoints on BIG-IQ using Java and an internal REST framework.

- > We built a large volume real-time event processing engine that provided

BIG-IP module log aggregation and analysis, support for complex structured queries over historical data,. Real time roll-ups updated on a per event basis and asynchronous REST based APIs that abstract event storage and query.

Technologies/Tools: Core Java, JSON, Lucene, REST, ant, JUnit, Perforce and Eclipse IDE

Software Engineer II / Tech lead, Bing Ads at Microsoft

January 2011 - February 2014 (3 years 2 months)

-> One of the original developers on the team that built a petabyte scale data warehouse by authoring low SLA map-reduce pipelines that generated datasets instrumental for training machine learning algorithms and driving business improvements.

-> Lead developer on the demand analytics project that included processing of over 20B Ad listings and 4M campaigns by computing time rolling statistics and aggregates and then loading data into SQL data marts for visualization and reporting.

Technologies/Tools: C#/.NET, Visual Studio, MS Test, XML and Cosmos/Scope.

Software Engineer, Network Management at ABB Inc.

January 2010 - January 2011 (1 year 1 month)

I worked on high volume data-driven Java applications deployed on a distributed system to help operators get a real time view of power outages, answer/mitigate outage calls and collect data about outages for predictive analytics.

Technologies/Tools: Core Java, SQL, Junit and Eclipse IDE

Research Engineer at Georgia Institute of Technology

January 2009 - January 2010 (1 year 1 month)

Researched and prototyped a framework towards the goal of deploying a Relational Database as a Service over the Cloud.

Software Engineer

June 2007 - June 2008 (1 year 1 month)

Developed Java / JSP based internal inventory management system and reduce the cost of operation for the company by seamlessly integrated with existing internal systems.

Technologies: Core Java, JSP and Eclipse IDE

Education

Georgia Institute of Technology

Master's Degree, Computer Science

University of Mumbai

Bachelor of Engineering, Information Technology

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[Contact Rohan on LinkedIn](#)