

OBJECTIVE: Looking for a team that inspires me.

SUMMARY:

- 11+ years experience of Software Development including 7+ years in Cloud, Big-Data & Distributed Systems.
- Senior Data Engineer in Streaming team at Uber, created pipeline to process 1.5 trillion msgs/ day (17+ million msgs/sec)
- Lead cross team project to create multi-zone Kafka deployment that can sustain datacenter failure without data loss.
- Speaker at prestigious technology conferences like ApacheCon, Hadoop Summit & Devovx - Europe.
- Apache Committer, member of team that created Kylin, eBay's first entry to Apache Foundation.
- Lead Streaming-as-a-Service team at eBay, building real-time data pipelines on cloud using Storm and Kafka.
- As part of cloud team, created eBay's private cloud based on 'Openstack' (among industry's biggest cloud).
- Experienced in design & implementation of High Volume Distributed Application and Cloud based systems.
- Industry certification in Big Data (CCDH, CCSHB) & Java (SCJP, SCWCD).
- Co-author of 3 patents at At&t and 2 patents (in process) at eBay

TECHNICAL SKILLS:

- Big-Data & No-SQL:
Experienced: KAFKA, CASSANDRA, HADOOP, HBASE, STORM, ZOOKEEPER, KYLIN
Familiar: MONGODB, COUCHBASE, ELASTICSEARCH, SPARK, FLUME
- Cloud Technologies:
Experienced: OPENSTACK, MESOS, AWS, KVM, CHEF, PUPPET, LOGSTASH, AWS Stack
Familiar: DOCKER, MESOS, SDN, SPLUNK, CLOUDFOUNDRY
- Languages: JAVA, PYTHON, GOLANG, BASH
- Frameworks & Tools: SPRING, FLASK, HIBERNATE, MYSQL, ORACLE, POSTGRES, GIT, JENKINS

EXPERIENCE:

Uber (Sr. Software Engineer II, Team Lead Manager)

Oct '15 – Present

[Sr Software Engineer -> Sr. Software Engineer II -> Team Lead Manager]

Streaming Team

- Created one of the industry's biggest Kafka based Streaming pipeline that is currently processing 1.5 Trillion Messages/Day with peaks over 20 Million Messages/sec.
- Lead performance improvements of home grown libraries for Kafka, taking p99 to < 5ms.
- Lead the live migration of 2000+ microservices from old system to new streaming system.
- Lead the reliability effort for Streaming systems by implementing outage detection and local spooling which increased the system reliability from 99.95% to 99.999%
- Created and open-sourced Chaperone, Auditing system for Kafka.
- Lead a cross team project involving 8 teams to design and implement a messaging pipeline that can sustain datacenter failure by synchronously replicating data to Cloud (first of its kind at Uber).
- Presented Uber's Streaming Infrastructure at ApacheCon-2016, Spain & Hadoop Summit-2017, San Jose.
- Presented Chaperone in Devovx-2017, Belgium to 400+ Audience (Europe's biggest Tech Conference)
- Co-Author of Uber's engineering blog on Kafka Auditing and Chaperone (<https://eng.uber.com/chaperone/>)

Cassandra Team

- Uber has 3000+ nodes Cassandra deployment with 300+ clusters, making it industry's top 5 by the scale.
- As a Team Lead Manager, I manage both the Cassandra engine development as well as Operation team. In this role I spend about half of time as an Individual Contributor and half of time as a Manager, managing team of 11 with 8 reporting to me.
- Lead the reliability & scalability effort of Cassandra. Brought down the service outages from 4/month to <1/Quarter.
- Lead the efficiency effort which has contributed to saving of \$14.5 million in 2018.
- Successfully Implemented and delivered a new management system that reduced the load of cluster operations and brought down the oncall load by reducing #alerts from 600 to 25 per week.
- Implementing all of the Security and Compliance related features for SOX compliance.

ASF, Apache Software Foundation (Member, Committer)**Nov '14 – Present**

Apache Kylin is an open source Distributed Analytics Engine that provides multidimensional OLAP on Hadoop for extremely large datasets and a SQL interface. Kylin is capable of serving billion plus rows in sub-second latency. Kylin was open-sourced by eBay in October 2014 and was accepted in Apache incubation soon after, making it eBay's first project to enter ASF. I was among initial committers of Kylin and am still associated with project.

eBay/PayPal (Staff Software Engineer, Team Lead)**Aug '11 – Sept '15**

[Sr Software Engineer -> Staff Software Engineer -> Team Lead]

Cloud Data Platforms Team (Staff Software Engineer)

The Cloud Data Platforms team is creating on-demand, high volume Data Streaming pipelines using open source streaming technologies like 'Kafka', 'Storm' & 'Spark' on top of eBay's openstack based private cloud.

Streaming as a service using Storm & Kafka (StraaS)

- Leading the design and implementation of StraaS Project.
- It's an openstack project developed for internal use with the intention of open-sourcing (Openstack Foundation)
- Create on-demand streaming infrastructure that can be leveraged by analytical application for real time events.
- Service decreases the latency of data availability between online & offline databases.
- Service provides API for the end user to run and manage data analysis jobs.
- It has distributed architecture modeled on openstack projects. Service can horizontally scale.

Tech: Python, Openstack, Apache Kafka, Apache Storm, Spark, Zookeeper, Puppet, Unix, Vagrant, Git.

Cloud Engineering Team (Sr. Software Engineer)

The Cloud Engineering team's charter has been to provide private cloud services (IaaS) to the eBay Inc. It started by building a developer class-of service private cloud with an end goal of completely virtualizing the eBay production. Built on Openstack, C3 has wide adoption internally with thousands of VMs running on it.

Openstack deployment

- Core member of team responsible for rolling out and managing Openstack based private cloud.
- Automated the Openstack deployment and orchestration with Chef.
- Team had dev-ops model where we developed code & did rollouts ourselves along with production L2.
- Created CI/CD, merging community code with our private code, testing and packaging of openstack code.
- Created Viper, a solution to provide High availability for VM based deployment using Corosync & Pacemaker.

Tech: Python, Java, Openstack, Jenkins, Git, Pacemaker, Logstash, Splunk, Zabbix, Unix, SDN, Chef

Log Aggregation using Flume, HBase & Hadoop

- Setup of scalable FLUME infrastructure to collect data from all cloud nodes, filter and stream them to data Persistence – HBase & Hadoop
- Made the setup reliable, automatically configurable and self-healing.
- Setup and tuning of HDFS & HBase for log warehousing.
- Implemented TSDB and Zabbix integration for real time alerting based on rule-sets on KPIs

Tech: Java, Hadoop, HBase, Openstack, Flume, Zabbix, OpenTSDB, Unix, Git

AT&T (Software Engineer)**Jun '10 – Aug '11**

As part of ACSI (Architectural and Common Services Integration) group, I was working on backend systems that dealt with order & procurement of At&t products and services. I was also involved in projects focused on merging the existing back end applications into one common application. Also contributed as a Code Analyst for one application and a developer for another.

- Worked in solution architecture team. Reviewing the designs and architectural change.
- Later worked with the Common Services group helping in identify the integration points of multiple systems.
- Developed few features in back-office ordering system using Java & Tibco.
- Co-inventor of a patent & another one under USPTO reviews.
- Led the team of 10 for a 3-month project.
- Worked as an application developer for two enhancement projects.

Tech: Java, Struts, JSP, Oracle, Fortify, TIBCO, XML-spy.

Founder at CES Solutions**Aug '07 – Jun '10****Life Technologies** (Jan '10 – Jun '10)

As part of 3-member team, I was responsible to analyzing the STLC at the Life Technologies and two of its recent acquisitions. All 3 subsidiaries had their own way of testing even though they used the same tool (HP Quality Center). We were responsible

for combining and standardizing the process for all SQA teams. It involved merging 3 HP QC instances into one and developing a new standard interface to bug tracking. (Tech: HP Quality Center)

Drive Down Prices (Jan '09 – Jan '10)

A start-up in the domain of auto trading developed an innovative reverse bidding system. As part of the small team, I was involved in full SDLC where we planned, built and tested a brand new platform. A new website with its advanced features of three different types of bidding and personalized video mails was developed ground-up and was in beta stage at end of my contract. Small team and new initiative gave a unique opportunity of close interaction with business and technical decision-making. (Tech: Java, JSP, MS SQL, Oracle, tomcat, struts, YUI, XML)

Windowbox.com (Jul '08 – Dec'08)

Windowbox is a small web based company selling plants and garden supplies. Company was writing a new order automation engine using .NET stack. I along with one more developer was responsible for full stack implementation of this engine. (Tech: NHibernate, NVelocity, ASP.NET, MS SQL, SVN, HTML)

Department of eLearning and Support, C.S.U.L.A.: (Aug'07- Jun'08)

Job was to develop and maintain the university web pages. The departments started making the website more advanced with the .NET stack and portion of the new web site was live by the time I left. (Tech: PHP, CSS,XML)

EDUCATION & CERTIFICATIONS:

- | | |
|---|---|
| • M.S. in Computer Science | [California State University, Los Angeles - Honor's Award, GPA -3.83] |
| • N.S.F. Graduate Fellow | [C.S.U.L.A, Research – Statistical Machine Learning] |
| • Bachelors of Engineering | [Thapar Institute of Engineering and Technology, India –GPA- 8.4/10] |
| • Sun Certified Java Programmer | [SCJP – 1.6, SUN/ORACLE] |
| • Sun Certified Web Component Developer | [SCWCD – 1.5, SUN/ORACLE] |
| • Cloudera Certified Developer for HADOOP | [CCDH, Cloudera] |
| • Cloudera Certified Specialist for HBASE | [CCSHB, Cloudera] |

LEADERSHIP EXPERIENCE & AWARDS:

- Tech lead at Uber and eBay. Track record of delivering complex, multi-team projects in time.
- Lead multiple projects in Kafka and Cassandra team at Uber which is one of biggest scale of both Kafka & Cassandra.
- Lead the design and engineering of StraaS at eBay. Won 2 Spot Awards for Engineering Contributions.
- Awarded with Special Recognition (Honor's award) by Department of Computer Science, CSULA.
- Founder and former Vice-President of 250 members strong Indian Student Association at CSULA.
- Selected for N.T.S.E at State level (Most prestigious academic scholarship for high school level in India)
- Served as Representative of engineering department students at University Placement Council of TIET, India.
- Acted as Secretary, Procurement in Saturnalia-06 (an inter-university technology cum cultural fest)
- Served as Board member of two clubs SAE, Patiala chapter and SOMIE, TIET.