

Jay Zhuang

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Summary

- Tech lead for building multiple distributed systems and scaling them up;
- 14+ years experience with large-scale database systems, ETL development, and management;
- Apache Cassandra committer, RocksDB contributor.

Experience

Meta

Jan. 2019 - Present

Staff Software Engineer

- Led RocksDB [Remote Compaction project](#) development which [improved the primary host throughput by up to 20%](#);
- Designed and implemented the RocksDB [Tiered Storage feature](#) which brings tiering inside of RocksDB;
- Implemented multiple RocksDB compaction improvements like [aligning compaction files to improve compaction by more than 10%](#); Designed a new compaction strategy RoundRobin which has more than 10% compaction improvement over the default one, mentoring an intern to finish building [this feature](#);
- Managed the largest Cassandra cluster in the world, fixed [Cassandra scaling blocking issues like consistency hashing token management and Gossip protocol](#);
- Designed and built the first ML Feature Store on [Rocksandra](#) which was used for all IG ML Feature Store.

Uber

Aug. 2016 - Jan. 2019

Senior Software Engineer II

- Tech lead for Uber Cassandra team, built Cassandra-as-a-service and running it at Uber scale;
- Designed and implemented [Cassandra CDC](#) feature;
- Built the framework to run Cassandra on Apache Mesos, setup the release pipeline, and fixed the Cassandra bugs in production, honored to be selected as Cassandra committer for fixing multiple [critical issues](#).

Amazon AWS

Feb. 2013 - Aug. 2016

Senior Software Engineer

- Rebuilt the [CloudSearch V2](#) with Open Source Solr engine and released it to production;
- Co-creator of [Amazon OpenSearch Service](#), designed, built, and maintained the new service which manages dozens thousand search clusters;
- Created the infra and tooling to scale up the service which manages a large number of search nodes (.

Microsoft

Oct. 2011 - Feb. 2013

Software Development Engineer

- Worked in Office SharePoint Enterprise Content Management team. Owner of the SharePoint 2013 Designer feature that converts the user's input to SharePoint design;
- Built and maintained public API interfaces and their backward/forward compatibility.

EMC

Jan. 2008 - Oct. 2011

Senior Software Development Engineer

- Responsible for storage control plane APIs (ESES: Extended SCSI Enclosure Services) design and development;
- Refactored the diagnostic module in a multi-thread environment which improved the performance and system stability.

Intel

Jun. 2007 - Nov. 2007

Software Engineer Intern

- Worked on open-source Linux project Mobin (MeeGo). Implemented the communication functions in customized Media Player for Helix D-Bus server.

Education

East China Normal University

Sep. 2005 - Jul. 2008

Master, Computer Science

Shanghai Institute of Technology

Sep. 2001 - Jul. 2005

Bachelor, Computer Science