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