Josh Elser

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Experienced backend software engineer with 15 years of expertise in distributed systems, databases, and open-source development. Passionate about building reliable and maintainable software, with a track record of designing and operating systems in Go and Java, both on-prem and in AWS, while fostering team success and growth.

Work Experience

Staff Software EngineerSundeck2022-2025Control PlaneRemote, MD/OH

- Built the Sundeck Broker that proxies Snowflake queries, capable of altering queries before execution on Snowflake. Deployed as a SAAS using Go and deployed on AWS Lambda.
- Built a Snowflake Native App capable of materializing customer Snowflake metadata in support of Broker reporting and warehouse optimization features. Implemented with SQL and Python.
- Built and maintained all Sundeck infrastructure and CI/CD pipelines using Github Workflows and Pulumi (Python).
- Provided technical support for customer on-boarding and support cases.

Principal Software Engineer

Cloudera/Hortonworks

2021-2022

Operational Database

Remote, MD

- Lead a team of engineers that delivered Apache HBase capable of leveraging cloud-native blob storage for table storage on AWS and Azure.
- Responsible for Apache HBase, ZooKeeper, and Phoenix in active and legacy Hortonworks and Cloudera products for on-prem and public cloud.
- Ensured Cloudera's priorities were in sync with upstream Apache Software Foundation communities.

Staff Software Engineer

Cloudera

2019-2021

Operational Database

Remote, MD

- Added filesystem storage quotas to Apache HBase and delivered to Cloudera customers.
- Added pluggable RPC authentication to HBase to simplify strong client authentication to HBase.

Engineering Manager

Hortonworks

2017-2019

Operational Database

Remote, MD

- Acted as the manager for the HBase/Phoenix/ZooKeeper team for ~8 developers.
- Built prototype for HBase write-ahead-log replacement using Apache Ratis (RAFT) to ease public-cloud adoption.

Software Engineer

Hortonworks

2013-2017

Operational Database

Remote, MD

- Added Apache Accumulo into Hortonworks Data Platform with Apache Ambari and Kerberos support.
- Helped build Apache Slider Incubating which ran HBase on Hadoop YARN.
- Built Apache Calcite Avatica to provide a thin JDBC driver for Apache Phoenix.

Software Engineer

SRA International

2010-2013

Columbia, MD

Data Warehousing with Apache Accumulo

Education and Certifications

B.S. Computer Science, Rensselaer Polytechnic Institute; Troy, NY

2006-2010

Technologies and Languages

• Languages: Go, Java, Python, Shell Scripting

SQL: Postgres, Snowflake

• Technologies: AWS, Docker, Kubernetes, Linux

Open Source Projects

Apache Calcite: Built Avatica, a generalized JDBC proxy over HTTP. (Committer and PMC member)

- Apache HBase: Major project contributor from versions 1.0 to 2.3. Notable features contributed include storage
 quotas, pluggable RPC authentication, and explicit tracking of table data files. (Committer and PMC member)
- Apache Phoenix: Integrated Avatica with Apache Phoenix to decouple complex client-side logic from user applications. (Committer and PMC member)
- Apache Incubator: Mentored multiple projects successfully through incubation: Apache Ratis, Rya, Fluo.
- Apache Software Foundation Member: ASF member responsible for continued growth of the Foundation.