Patrick King

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Mobile: +1-503-805-4667
Location: Portland, OR

EXPERIENCE

- **Yelp** — San Francisco, CA
  Data Reliability Engineer — *May 2016 - December 2017*
  - **MySQL Database Server Auto Scaling**: Built software that intelligently scaled our MySQL clusters based on CPU usage and average query time leveraging in house tooling as well as custom automation written in Python.
  - **PostgreSQL Optimization**: Responsible for optimizing multiple PostgreSQL database clusters for better performance, which reduced the number AWS instances resulting in a substantial cost savings.
  - **Operational Maintainability**: Migrated all of the DRE teams SignalFX charts and detectors from manually created dashboards to use SignalForm, thereby moving all the definitions into version controlled code. Reducing mistakes and increasing maintainability and reducing variance.
  - **MySQL Specific AMI**: Reduced production database deployment time by %75 by rewriting the bootstrapping process using Packer to build custom baked MySQL images.
  - **Other Achievements**:
    * Upgraded MySQL across all environments to the most recent major version.
    * Wrote a tool that would compare MySQL binary logs between two version of MySQL.
    * Leveraged data contained in Splunk to write a predictive disk space alert for our MySQL servers.
    * Deployed VividCortex as a database monitoring solution, and taught courses on how to use its data.

- **Pandora Media, Inc** — Oakland, CA
  Database Administrator — *May 2013 - April 2016*
  - **PostgreSQL Automated Backup Testing**: Crated an automation pipeline in Python to backup our 200+ prodution PostgreSQL databases, restore them to verify backup was valid, and attach them to the appropriate replication stream to make sure we could use the backup in a DR scenario.
  - **Automatic Setup of PostgreSQL Replica Servers**: Implemented service discovery for database bootstrapping and replication, saving the DBA team hundreds of hours of manual configuration.
  - **PostgreSQL Performance Analysis Tooling**: Developed a pluggable framework to gather time-series metrics, and then used that to gather internal PostgreSQL metrics for performance analytics.
  - **Other Achievements**:
    * Major upgrade of PostgreSQL across our entire environment.
    * Hadoop and Hive administration.

- **Rentrak** — Portland, OR
  Database Administrator — *August 2011 - May 2013*
  - Decreased PostgreSQL backup time by a factor of ten.
  - Implemented read-only database clones by leveraging NetApp snapshots.
  - Migration from physical PostgreSQL servers to HA VMware/NetApp environment.
  - Developed and delivered internal auditing tools that decreased the DBA workload.

- **Elemental Technologies** — Portland, OR
  Software Test Engineer (Contract) — *January 2011 - June 2011*
  - Worked on testing Elemental's two main products for compliance to many different video standards. Daily tasks included encoding and watching different video files, as well as watching live video. I was also responsible for the performance testing on Elemental's major releases.

CONFERENCE PRESENTATIONS

- **PostgreSQL to MySQL: A DBA Perspective - Percona Live 2017**: My retrospective after one year of transitioning from a PostgreSQL DBA to a MySQL DBA.
- **Using pg_repack to Bulk Delete Data - Postgres Vision 2016**: A 15 minute presentation about using pg_repack to bulk delete data from highly contested tables.

TECHNICAL SKILLS

- **Technologies**: PostgreSQL, MySQL, Puppet, AWS, Terraform, Packer, SignalFX, Splunk, VividCortex
- **Languages**: SQL, Python, Bash