JOSHUA SLED

jsled@asynchronous.org ⋯ asynchronous.org ⋯ github.com/jsled ⋯ 510-851-4149 ⋯ Hinesburg, Vermont, US ⋯ Résumé in PDF

Software developer turned engineering director. I want to build and grow teams, lead them to deliver projects successfully, and participate in the direction of the organization from a technological basis.

WORK HISTORY

MYSQL / SUN MICROSYSTEMS / ORACLE: 2008 - 2024 — VARIOUS POSITIONS

May 2022 - November 2024 — Director of Operations for HeatWave Service, Oracle Cloud Infrastructure, Oracle

I directed a global team of 11, responsible for the Operations and Site Reliability Engineering of the HeatWave Service (previously "MySQL Database Service") in Oracle's Cloud Infrastructure (OCI).

- Operations
  - Manage 24×7 staff across "Tier 1" (On-Duty), "Tier 2" (Subject Matter Experts), and an Operations Manager rotation of myself and other senior staff.
  - Establish policies, practices, and procedures to help ~200 individuals/week coördinate operational work.
  - Collaborate with MySQL and OCI Support on inbound customer issues.
  - Perform retrospective activity on operational missteps.
  - Coördinate the creation of metrics, dashboards, alarms, checklists, runbooks, and training material for multiple audiences.
  - Build out new infrastructure in Oracle's aggressive expansion of global data-centers.
  - Handle compliance, regulatory, and security tasks and best-practices: disaster recovery exercises, access-control review, attestation of compliance, &c.
  - Manage approximately 500 virtual machines that comprise the control-plane across approximately 50 cloud regions (as well as bastion, front-end termination, load-balancer, and other infrastructure). We also manage an orders-of-magnitude-larger number of customer data-plane instances.
- Site-Reliability Engineering
  - Remediate exceptional issues unhandled by the service.
  - Project-manage SRE-relevant development efforts: toil reduction, reporting, operational tooling, service feature back-fill, &c.
  - Develop operations tooling and perform peer code review; mentor junior engineers.
- Build and Deploy
  - Build and deploy the service control- and data-plane on a weekly cadence.
  - Monitor and promote the build through dev → preprod → production stages, with testing and analysis between promotions.
  - Provide feedback on build health; make changes to org-wide code-review criteria to prevent build- and deploy-time regressions.

Notably, in the summer of 2023, I stepped beyond the role to provide program management for an exceptional, organization-wide effort to achieve FedRAMP compliance and certification.

May 2021 - May 2022 — "Technical Program Manager", MySQL Database Service

As an individual contributor, I increasingly performed project- and technical-management work, including meeting organization and facilitation, task-tracking, mentoring junior-developers, code review, and cross-team collaboration.

January 2018 - May 2021 — Senior Software Engineer, MySQL Database Service

I was part of one of the first few teams to build out past Oracle Cloud Infrastructure's original offering, to provide "MySQL as a Service".

I participated in every part of bootstrapping the service: service architecture, control-plane workflow design and implementation, build tooling, operations tooling, internal documentation and developer relations, coding standards, very early devops support, infrastructure build-out, unit/integration testing, CI/CD infrastructure, and collaboration with other OCI teams. I created our "Build/Deploy" process, establishing a weekly deployment cadence, significantly faster than any other team in the MySQL business unit.

I had a particular hand in the RESTful public API design for the service, and it is a general topic I continue to support other teams with.

March 2008 - January 2018 — Senior Software Developer, MySQL Enterprise Monitor

MySQL Enterprise Monitor was an on-premises Java-based monitoring client and server, with a web-based user interface, for monitoring MySQL server installations.

Starting in the backend team, I eventually moved to the leadership of the front-end team. We added many features, overhauled the user interface, and kept up with various Oracle requirements. This project featured a RESTful UI design, extensive unit- and Selenium-based front-end testing, and regular customer contact.

SPOKE SOFTWARE: 2002 - 2008 — SENIOR SOFTWARE ENGINEER

Spoke was "Friendster for sales people", using email data to create a social-network graph.

- Setup internal development-support systems (cvs, bugzilla, twiki, irc, nagios) for this startup.
- Participated in the "1.0" system spec, design and build: lead designer for RESTful app/platform API, co-designer of platform system data-model and infrastructure, implementer of core business-logic.
- Designed and implemented a person-search engine, as well as an entity-resolution system to resolve multiple graph nodes to a single individual.
- Designed and implemented a web scraper that used natural lanaguage processing to perform feature analysis to extract corporate bios and company information from public websites.

SMARTTOUCH / PAYBYTOUCH / INDIVOS: 1999 - 2002 — SENIOR SOFTWARE ENGINEER

Indivos provided a biometric point-of-sale payment system: scan your fingerprint in the grocery lane to unlock your bank accounts.

- Setup internal development-support systems for this startup.
- Developed an application-level database encryption layer, USB 1.1 stack, and multiple application-protocol handlers to interface custom biometric hardware with existing point-of-sale payment terminals.
- Developed and brought up a custom StrongArm-based embedded hardware design.
- Created an in-house webapp to manage biometric hardware/software testing.
- Performed field work to install and support multiple pilot projects.

EDUCATION

UC BERKELEY, ELECTRICAL ENGINEERING AND COMPUTER SCIENCE (BS, 1999)

- Member of the eXperimental Computing Facility

OPEN SOURCE

BREW JOURNAL: 2008 - 2014 — AUTHOR, OPERATOR

github.com/jsled/brew-journal

A Python/Django application for tracking the state of homebrew (ie. beer and cider) recipes and brewing process details. I ran this as a public site, but ultimately let it shutter as I moved away from the hobby.

GNUCASH: 2001 - 2010 — CORE CONTRIBUTOR

gnucash.org

Contributor to the popular open-source personal financial management program GnuCash, adding user-interface, program-logic and backend support for Scheduled (Recurring) Transactions, as well as general open-source project support (IRC and mailing list responses, web-site updates, project system administration, &c).

TECHNOLOGIES

- **Cloud/DevOps:** Grafana, Jenkins, Oracle Cloud Infrastructure (public and internal), Terraform
- **Databases:** MySQL
- **Languages and Frameworks:** CSS, HTML, Java (Spring, JUnit), Javascript, Python (Django, pytest)
- **Methodologies:** ad-hoc, Agile, Scrum, Kanban
- **Technologies:** HTTP, RDF, REST, RSS, SQL
- **Tools:** Bash, Confluence, Emacs, Git, Jira, Linux (Gentoo, Oracle Linux), VirtualBox