Elixir Engineer

Profile

Experienced DevOps Engineer with more than a decade doing both operations and software development for startups. I am looking to move back into the operations space.

Professional Experience

2022 - 2023 **Senior Elixir Software Engineer**, *Datajoin*, Provo, Utah (Remote), USA

- o Mentored junior engineers on Elxir and AWS best practices.
- Architected the S3 data processing pipeline which consumed S3 upload EventBus events in application.
- o Collaborated with the product owners
- Responsible for observability, which allowed us to understand how extremely complicated integration tasks which consume multiple different third party APIs are behaving at every step of the process. This includes ensuring OpenTelemetry instrumentation, of code, training other developers how to use it, writing internal tooling to enable the development experience.
- Responsible for CI/CD. Ensured reproducibility, rapid team deployment velocity, and reliability using Docker, NixOS, and Ansible.
- o Responsible for automated Infrastructure. This means ensuring that AWS infrastructure was appropriately designed and segmented with Terraform. Also includes security and operations alerting, data lifecycle management, and appropriate secrets management.

2021 - 2022 Elixir Software Engineer, Immersiva, Los Angeles (Remote), USA

- Responsible for a full greenfield product rewrite of a Node.js based prototype game engine into AWS EC2 hosted Elixir, with a LiveView frontend that functions on multiple different platforms. The game engine state machine is a pure Elixir GenServer implementation.
- o Custom Auth0 authenticated Content Management System for content development including media uploads into Amazon S3.
- o Implemented CDN functionality utilizing Cloudfront for game assets.
- Implemented a full OpenTelemetry instrumentation of the state machine and LiveView platform.

2019 - Nov 2020 Elixir Engineer, SafeBoda, Kampala (Remote), Uganda

- o Rewrote a 50m/day mobile application API as a PHP->Elixir migration.
- o Minimized customer downtime using LaunchDarkly feature flags to move primary code paths.
- Audited PHP and Elixir codebase for security vulnerabilities.
- Architected a migration from Heroku infrastructure to AWS infrastructure managed by Terraform infrastructure as code. This resulted in an approximate 70% infrastructure cost savings.
- o Responsible for CI/CD. Ensured reproducibility, rapid team deployment velocity, and reliability using Docker, NixOS, and Ansible.
- 2019 **DevOps Contractor**, Blast Technologies (Remote), Austrailia
 - o Development of fully Puppet-managed Asterisk PBX.
 - Open sourced Asterisk Puppet work. [Puppet Asterisk module https://github.com/jo
- 2018 **DevOps Contractor**, coder.com, Austin, Texas
 - Architected GCP infrastructure for coder.com.
 - o Implemented migration from CircleCI to Jenkins for self-hosted CI infrastructure.
- 2013-2018 DevOps Contractor, Upwork Varied small & medium projects
 - Setup 50 node Chef managed cluster for a visual search engine concept, including a Ceph managed storage backend.
 - o Designed a Puppet-managed site deployment solution (~75 nodes) that deploys Wordpress sites as well as interfacing with associated registrar APIs to manage DNS. Hefty amount of Perl glue to accomplish this.
- 2012-2013 Linux System Administrator, Rackspace, San Antonio, Texas
 - Was responsible for handling for RHEL, CentOS, and Debian support for Rackspace EMEA customers while simultaneously serving as an escalation point within my team for more complicated tasks.

Notable Personal Projects

- O An implementation of EVE Online Industry with an Elixir LiveView frontend. Was instrumental in my initial learning of LiveView and continues to be extremely useful for making large amounts of game currency to plan my industry activities. The project is open sourced and it is up on my github. [https://github.com/jowrjowr/eveindustry]
- O A conversion of a legacy PHP application that serves approximately a thousand users into a Python based REST API built upon Flask. This includes a core authentication migrationinto LDAP. This application interfaces with a large number of 3rd party external APIs. The purpose of this was to teach myself modern Python and support the IT infrastructure of an entity within a game I played. Ended up open sourcing it all once everything was decomissioned. [https://github.com/jowrjowr/tri_api]

Education

2009 Bachelor of Science in Physics, University of Alaska, Fairbanks, US

Technical Skills

Programming & Elixir, Python, Javascript, Bash.

Scripting

Languages

Operating Linux.

Systems

Cloud & AWS, Google Cloud, VMWare.

Virtualization

Providers

Configuration Puppet, Ansible, Chef

 ${\bf Management}$

References

[Puppet Asterisk module https://github.com/jowrjowr/puppet-asterisk]

[https://github.com/jowrjowr/tri_api]

[https://github.com/jowrjowr/eveindustry]

[https://business.adobe.com/summit/2023/sessions/activate-beyond-adobe-solutions-integrate-adobe-ev-level-adobe-solutions-integrate-adobe-ev-level-adobe-solutions-integrate-adobe-ev-level-adobe-solutions-integrate-adobe-ev-level-adobe-solutions-integrate-adobe-ev-level-adobe-solutions-integrate-adobe-ev-level-adobe-solutions-integrate-adobe-solutions-integrate-adobe-solutions-integrate-adobe-ev-level-adobe-solutions-integrate-adobe-solution-adobe-solution-adobe-solution-adobe-solution-adobe-solution-adobe

[https://gist.github.com/jowrjowr/56a36a3da9a039038b8504b73bfe2461]