## Senior Software Engineer

### Profile

An experienced software and infrastructur engineer, with more than 15 years experience in all aspects of software development, systems design and implementation, and operations. Tempered by experiences in the fast paced and high pressure environments of startups, I'm confident and capable of meeting any business needs as they arise. I am looking for an opportunity to apply my skills and experience, while continuing to grow as an engineer.

## Key Skills

Languages Elixir, Python, Javascript, Bash.

OSes Linux (RHEL, Debian, other variants)

Observability Opentelemetry, Honeycomb, Datadog, New Relic, Prometheus, Grafana,

Icinga

Virtualization AWS, Google Cloud, VMWare

Automation Terraform, Puppet, Ansible, Chef

Mentorship Mentoring junior engineers on all aspects of software development and

operations.

## Professional Experience

2024 **Senior Elixir Engineer (Contract)**, *Epic Creative*, Chicago (Remote), USA

- Architected & built a platform to securely store, run, and monitor arbitrary customer code executed on ephemeral cloud environments.
- Built nix-based runtime environments to handle execution of autoscaling Elixir FLAME managed code.
- Developed API for platform management by customers, engaging with all stakeholders to ensure the best customer experience.
- Developed full instrumentation to ensure smooth operation and enable effective and efficient response to problems in production.
- o Built Github Actions CI for testing and evaluating code quality & correctness, and building containerized code ready for production.

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

- o Developed the reference product integration work for 3rd party platforms like Adobe Analytics, Salesforce, Marketo. This work was featured in the 2023 Adobe summit (See footnote #4).
- o Mentored junior engineers on Elixir and AWS best practices in order to more rapidly build support for similar products within the platform.
- Architected a complete overhaul of the Datajoin microintegrations product platform, incorporating institutional learnings from the previous implementation which improved the customer experience, product reliability, and scalability.
- Developed the S3 data processing pipeline which consumed S3 upload events in Broadway to run data processing within OBAN.
- Collaborated with the product owners to rapidly iterate on customer feedback and support business needs.
- Owner and subject matter expert for all aspects of observability in the company, which routinely provided critical insights for improving reliability and stability of the complex workflows at the heart of the business. Developed instrumentation standards, and enforcement, as well as tooling to make the process effortless for engineers.
- o Tech lead for CI/CD, with a strong focus on reproducibility, reliability, and speed. The improvements enabled software to be deployed more safely and reliably, allowing engineering resources to focus on development.
- Designed and implemented a secure and reliable infrastructure, fully automated in Terraform, and incorporating industry best practices. This made it easy to adapt and modify the production environment to meet any changing business needs.

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

- O Successfully lead a full product rewrite of a NodeJS prototype game engine, which was the core company product, into Elixir while utilizing a LiveView frontend. This rewrite enabled functionality on multiple different hardware platforms such as Android devices (Smart TVs and phones) and the Samsung Tizen devices.
- Architected the Elixir rewrite into a fully managed AWS hosted platform, with a LiveView frontend that functions on multiple different platforms.
  The game engine state machine is a pure Elixir GenServer implementation.
- o Built out test automation to ensure continued smooth operation across most major hardware and software platforms, including mobile devices.
- Developed a secure platform to enable ease of content development and deployment for the engine, leveraging common industry tooling like Auth0 and AWS S3.

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

 $_{\odot}$  Seamlessly ported 50m/day mobile application from PHP to Elixir, with no customer impact.

- $\circ$  Architected new AWS cloud infrastructure managed by Terraform, as a part of the rewrite process. This resulted in a ~70% infrastructure cost savings.
- 2019 **DevOps Engineer (Contract)**, Blast Technologies (Remote), Austrailia o Development and ran a fully Puppet-managed Asterisk PBX.
- 2018 DevOps Engineer (Contract), coder.com, Austin, Texas
  - o Architected GCP infrastructure for coder.com.
- 2013-2018 DevOps Contractor, Upwork Varied small & medium projects
  - Various projects, designing and implementing solutions such as Ceph storage clusters and large scale automated Wordpress environments.
- 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 migration into 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

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-s

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