

Personal Summary

SRE (SWE) with wide experience of online media and web services. Advocate of observability, automation and continuous delivery; aiming to produce reproducible and scalable products with a low total cost of ownership. Knowledge over a variety of IaaS platforms, such as AWS and GCP, as well as knowledge of building PaaS solutions using Docker & Kubernetes.

Skills

- Linux, Debian 8 & Ubuntu 12.04 onwards
- Python (+mypy) including FastAPI & gRPC.
- Clojure, including Ring/Compojure & core.async.
- TDD and BDD experience using pytest + pytest-bdd
- Working SQL knowledge with data analysis experience.
- Event based architectures and asynchronous processing.
- Streaming data analysis with Spark or Kafka Streams.
- AWS and GCP with EKS and GKE managed Kubernetes.
- SaltStack/Ansible with Terraform provisioning.
- CI and CD knowledge, Drone/Github Actions/Gitlab.
- MySQL, Postgres & CockroachDB.
- Elasticsearch/Redis/Cassandra/BigQuery.
- Observability using OpenTelemetry, Prometheus and Datadog
- Management and tutoring.

Achievements

- Standardised Python development tooling at Ki Insurance to reduce onboarding costs. Built repository and application templates that allow less technical members of staff to start a new project while also including all of our expected requirements around security, observability and reliability.
- Built out observability tooling for organisation and helped onboard teams to use SLOs as markers for reliability and overall health. This enabled teams within the engineering organisation to use quantitative data with which to balance competing product and engineering objectives.
- Built a fully event driven backend for a market research SaaS platform that allowed marketers to view live updates as research was completed. This real time processing allowed sample quality to be measured at the user level, disqualifying any responses not meeting our standard. This saved us 30% on sample costs per study, the difference was split between higher margin and raising quality minimums to extend moat over competition. Built out backend apis for external developer usage or full white labelling, plus an admin backend for billing and usage monitoring.
- Scaled an RTB advertising platform to over one million events a second (led a team of 6) while keeping operational overhead low through containers, configuration management, chaos testing and leveraging SaaS products to reduce complexity.

Experience

Ki Insurance (Brit Group Services) – May 2023 – Present, Senior Backend Engineer

Lead backend engineering of multi syndicate back of office tooling for managing of contracts throughout the insurance lifecycle. Produced tooling that flexibly handles data complexity while still offering strong consistency guarantees; this technology now processes every policy bound by the business. Introduced SLOs and error budgets to the organisation, combining this with SLAs and risk registers we were able to manage risk while not adversely affecting the overall product velocity. Implemented development tooling to decrease onboarding time for new engineers, Nix was used for cross platform developer dependency management which allowed developers to choose their environment but receive a standardised set of packages to work with.

BritX (Brit Group Services) – October 2021 – May 2023, Senior Backend Engineer

Built a series of products turning unstructured documents (quotes, final slips and spreadsheets) into structured data using Computer Vision and Entity Recognition combined with human feedback & validation. Built tooling increased both throughput per individual and mean turnaround time for members of the operations team which used the products. Provided technical leadership in backend engineering, guiding the team around technical challenges and ensuring that we delivered at a fast pace without incurring technical debt which would have to be paid off in the future. Provided guidance and tutoring for more junior members of staff to bring them up to the teams standard.

Crowd Emotion (Element Human) – July 2019 – October 2021, Senior Engineer

Developed a brand new SaaS product for market research as part of a seed stage startup. Platform reduced lead time on market research data gathering down from weeks to hours. Platform was built as an API first design to allow third parties to build and integrate their existing workflows into our tool. Developed engineering culture at the team, pushing for a fully automated workflow for engineers using extensive automated testing to deliver correct software to production multiple times a day. Managed technical recruitment for the company and the doubling of the team in size.

Infectious Media (now part of the Kepler Group) – November 2016 – March 2019, Lead Site Reliability Engineer

Leading a team of four engineers managing our internal advertising platform. This included scaling from just the EU to being a global business in the US and APAC, scaling up to a million requests a second at a 50ms response time. Created a culture of software testing within both the operations and data teams, enabling us to deliver quicker and with fewer defects. Developed a user history data pipeline, from pixel event through data processing to database ingestion for over 600 million users and 25 billion events a day.

Infectious Media (now part of the Kepler Group) – January 2015 – November 2016, Production Engineer

Migration from a static traditional architecture through to a more dynamic cloud oriented design, scaling based upon resource needs. A 30% reduction in total operating cost was achieved through more efficient resource utilisation as a result of this change. Implemented a continuous delivery (and continuous deployment) pipeline to enable quicker iteration with a lower business risk.

First Clarity & Evolok – September 2013 – January 2015, Systems Administrator

During my time at First Clarity & Evolok I worked with UK and international publishing houses on a variety of projects, from full stack infrastructure and application upgrades through to daily maintenance. Built and deployed paywall solutions for international publishing groups (DMG, Conde Nast).

Catalyst2 – September 2012 – September 2013, Technical Specialist

My primary duties were the management of customer queries and complaints while ensuring we met our SLAs, this was a mixture of both help desk, break fix and managed service work. Other duties included maintenance of our infrastructure, documentation and hardware development & deployment.

LDE Data communications September 2008 – June 2011, Data Communications Engineer

Maintained and developed a large communications network (MPLS) over a variety of mediums (VDSL to ensure an effective, reliable and dependable service to the customer. Position included development of networks from the planning stage through to installation and maintenance.

Education and Qualifications

Environmental Management 2:2 (BSc Hons), achieved 2012 from University of Worcester. References available upon request. <https://github.com/Poogles>