Michael J Kelly

Software Engineer in New York City. m@michaelkelly.org, https://www.michaelkelly.org.

I love building great software and keeping it running while automating away as much work as possible.

Work

Meta (formerly Facebook), 2019-present: Production Engineer.

- I work on an AI infrastructure team. I focus on tooling and process for testing and deploying training systems. I build and manage CI and CD pipelines for training tools. I work with DevX teams to adapt internal tools to AI usecases. Part of an on-call rotation for training system release.
- Previously, I worked on infrastructure for Facebook Messenger. I led day-to-day capacity management, ensuring Messenger infrastructure had enough capacity for unexpected load spikes and could withstand datacenter failures. I worked on capacity planning for large infrastructure migrations, improved load balancing/traffic shifting tools, and helped define our internally-facing SLOs. I was part of a 24/7 on-call rotation.

Vimeo, 2015-2019: Site Reliability Engineer (2015-2017), Lead SRE (2017-2019).

- As a Lead SRE, I was a technical lead and people manager. I grew the team from 2 to 6 people. I led the SRE team in moving the vimeo.com serving stack from our own datacenters to Google Cloud. I focused on building repeatable processes and reusable tools for the SRE team.
- I joined Vimeo as its second Site Reliability Engineer. I automated bare metal and VM provisioning and other common tasks, expanded our configuration management, led a migration from PHP 5 to 7, built out our team's wiki with common procedures, and took part in a 24/7 on-call rotation for vimeo.com.

Google, 2009-2015: Site Reliability Engineer.

- I co-designed and built framework for automated testing of data recovery.
- I worked on datacenter reliability, and ran a real-life large-scale power failure exercise.
- I wrote deployment automation, and was part of a 24/7 on-call rotation for a core infrastructure service (Chubby).

Google, 2008: Intern, Site Reliability Engineering.

Designed and wrote an extension to an archiving utility for increased scalability (C++, using MapReduce).

University of California, San Diego, 2006-2009: Programmer.

Worked on Ubiquitous Presenter, a research project to webcast lectures and facilitate active learning exercises. (PHP on the server, C# on the client. I was a co-author of a SIGCSE 2007 paper.)

University of California, San Diego, 2006-2008: Computer Science Tutor.

Graded projects and tests, and held office hours for for systems programming, compilers, and introductory courses.

Google, 2007: Intern, Software Quality Assurance.

Automated performance testing and reporting for GMail user interface.

Technologies

- I'm most fluent in Python and Go, on Linux.
- In the past I've written PHP/Hack, Javascript, Java, C++, C, Ruby, and Perl.
- At Vimeo we used Google Cloud Platform (GCP), Terraform, Chef, Packer, Kubernetes, and Docker. We also ran CentOS 6/7 on bare metal and VMWare with automated kickstart provisioning.

School

University of California, San Diego, 2009: Bachelors of Science, Computer Science.

Student radio, 2006-2009: I was a developer/sysadmin for KSDT, the student radio station at UC San Diego. I also had a radio show focused on metal.

Play

GitHub profile, https://github.com/mjkelly, has some small-scale side projects.

Open source contributions, 2013-2014: Minor contributions to Go standard library and hterm.

rev: 2024-06-08