

Greg Weber

Experienced Software Engineer

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📄 github.com/gregwebs

In my current position as a hands-on manager and technical lead I have turned around a low-performing team into a lean, productive, and highly skilled team.

At my previous employer, I created the first version of their SaaS offering to deploy their distributed database that is now a focus of their business. At my current employer I am responsible for all cloud infrastructure. I hired and worked with another engineer to put all infrastructure under configuration management and make changes to upgrade our infrastructure to SOC 2 standards.

At a biotech company, I managed the infrastructure for the analytic component by writing code for services, getting infrastructure under the management of Terraform, and architecting to reduce our compliance burden.

Experience

- management and tech lead I have turned around a low performing team, introduced many best practices, and mentored engineers.
- dev-ops and infrastructure Cloud (AWS, GCP) and Kubernetes. Lead the creation of the first version of TiDB Cloud, a distributed cloud-hosted database.
- Compliance/Regulation HIPAA and SOC2. Developed documentation, process, architecture, and tooling to satisfy regulatory requirements. Currently undergoin a SOC 2 audit
- Security Enhancing security features, improving code quality for security, and developing a process for responding to security issues
- Backend Web applications, services, etc in Golang, Haskell, Ruby on Rails, and Python
- Hard Problems Developed a novel method to extract tabular data from PDFs. Worked to improve database security and performance stability: <https://github.com/tikv/rfcs/pulls?q=is%3Apr+author%3Agregwebs>
- Static Safety Introduced optional typing with MyPy (Python), TypeScript, and Flow (Javascript) as well as static analysis linters for Golang.
- Web Frontend Front end Javascript (TypeScript) experience. Great ability to make web UIs work well, but limited design abilities.
 - <https://eatnutrients.com> a client-side React application I made

Programming Languages

- Go Cloud, Kubernetes, and backend services programming. Created several libraries for better error handling.
- <https://github.com/gregwebs/errcode>
 - <https://github.com/gregwebs/go-recovery>
 - <https://github.com/gregwebs/errors> (a fork)
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- Rust I have programmed professionally by contributing to the open source TiKV code base. I also authored the rust-process-iterator crate.
- <https://github.com/tikv/tikv/pull/9647>
 - <https://github.com/tikv/tikv/pull/9696/files>
 - <https://blog.gregweber.info/rust-process-iterator/>
- Javascript TypeScript in configuration management with Pulumi and AWS CDK. Frontend with React:
- <https://github.com/gregwebs/StateTree> a Statechart library
- Haskell Programmed professionally and authored, maintained, or contributed to many highly used community libraries such as Persistent, Yesod, Shelly, and xss-sanitize.
- Yesod (web framework)
 - Persistent (database "ORM")
 - xss-sanitize (xss attack prevention)
- Python Experience in pipeline, infrastructure, and analysis settings. I have successfully introduced MyPy, unit testing, and continuous integration into Python code bases.
- Ruby I have developed Ruby on Rails application and published small Ruby gems in the past

Recent Positions

- 2022 – Now **Principal Engineer**, *Digital Mint*, Chicago.
- I am a manager and technical lead in charge of all software development and responsible for its operation. I have turned around a low performing team, introduced many best practices, mentored engineers, and undergone a SOC 2 audit.
- 2018 – 2022 **Senior Cloud Engineer**, *PingCAP*, San Mateo.
- I lead the development of the initial version of TiDB Cloud and continued with a focus on security and cloud integration. SOC2 compliance. Databases, cloud, Kubernetes. Most of my work was not on open source, but there are some open source contributions:
- <https://github.com/tikv/tikv/pull/9647>
 - <https://github.com/pingcap/tidb-operator/pull/789/files>

2015 – 2018 **Senior Software Engineer**, *Karius*, Redwood City.

Lead software engineering of the production analytic component and infrastructure at this biotech company.

- Built a job flow controller that scaled up to thousands of machines and down to zero.
- Stabilized research grade software. Managed releases for the software powering the analysis of our diagnostic.
- Developed regulatory documentation
- Involved with HIPAA compliance.

2015 **Lead Engineer**, *Pivot Mail*, San Jose.

A security company (encrypted email) that extensively used Haskell.

I was involved with improving infrastructure, making specifications, and release management. I got started on a project to cross-deploy a secure Haskell backend to different platforms before the company was wound down.

2013–2014 **Lead Engineer**, *Docmunch*, San Francisco.

Developed a novel PDF table extraction technique from first principles. Wrote frontend and backend web app code. The company was sold.

Education

2005 **B.S. ECE**, *University of Iowa*.

Publications

Shell scripting with type-safety using Haskell

Original article published in the German Linux Magazin.

Translated to English:

<http://www.linux-magazin.de/Online-Artikel/>

[Shell-scripting-with-type-safety-using-Haskell/](#)

Presentations

Functional Front End Coding

<http://begriffs.com/posts/2015-11-30-functional-front-end-coding.html>

Shell scripting with Shelly

<http://www.meetup.com/haskellhackersathackerdojo/events/91714772/>

Building complex UIs with AngularJS

<http://www.youtube.com/watch?v=VxuN6W03tIA>

Publications