Greg Weber

Experienced Software Engineer

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My goal is to have a big impact in my next position. In my last position, I was a manager and hands-on lead developer that directed software development. In my prior position, I created the first version of their SaaS offering to deploy their distributed database, which is now a focus of their business. In the position prior I developed a data pipeline that scaled to hundreds of nodes.

In these positions I have been heavily involved with infrastructure work. This includes developing API services, integrating with cloud provider (GCP and AWS) integrations, using Kubernetes, and achieving SOC 2 and HIPAA compliance.

Experience

dev-ops and infrastructure	10+ years experience. Cloud (AWS, GCP) and Kubernetes. Lead the creation of the first version of TiDB Cloud, a distributed cloud-hosted database. Configruation management with Pulumi, Terraform, and CloudFormation
Backend	15+ years experience. Web applications and services in Golang, Haskell, and Ruby on Rails
Compliance/ Regulation	5+ years experience. SOC 2, HIPAA, and financial compliance. Developed documentation, process, architecture, and tooling to satisfy regulatory requirements
Security	Enhancing security features, reviewing security posture, improving code quality for security, and developing a process for responding to security issues
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 Typescript, MyPy (Python), and linters for Golang.
Web Frontend	5+ years experience. Front-end Javascript (TypeScript) experience. Basic CSS abilities. ○ `https://eatnutrients.com` a client-side React application I made ○ `https://docjumper.com` a client-side React application I contributed to

Programming Languages

Go	6+ years experience. Cloud, Kubernetes, and web services programming. Created a library for precisely handling error codes. `https://github.com/pingcap/errcode`
Typescript	5+ years experience. TypeScript and Javascript for frontend development with React. Typescript in configuration management with Pulumi and AWS CDK. Wrote 2 different frontend applications: eatnutrients.com and docjumper.com.

Rust	I have programmed professionally by contributing to the open source TiKV code base and writing an agent in Rust. My experience with Haskell makes Rust concepts easy to pick up.
	○ https://github.com/tikv/tikv/pull/9647
	○ https://github.com/tikv/tikv/pull/9696/files
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 Jobs

2022 - 2025   **Principal Engineer**, *Digital Mint*, Chicago.

I managed a small team and spent most of my time as a hands-on lead developer. I reviewed code, did release management, and wrote code every day. I turned around a low performing team into a productive team that cleaned up technical debt and achieved SOC 2 compliance. I worked closely with those outside engineering to understand our processes and business needs.

2018 – 2022   **Senior Software 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 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   **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 that used Haskell.
I improved infrastructure, made specifications, and did release management, and worked on a cross-deployment project 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.
First engineer at a startup. Led development and technical interviews.

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=VxuN6WO3tIA