Mercedes Bernard



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As an engineer, I bring a unique blend of technical knowledge, non-technical language, and compassion to all of my projects. My stakeholders and team consistently report feeling empowered, comfortable, and heard.

As a leader, I care deeply about my team health and feedback culture. I strive to foster an environment where each individual's unique set of strengths and ideas have space to grow and better the organization.

I am exclusively welcoming remote opportunities.

Education

DePaul University Summa Cum Laude

B.Sc. in Computer Science Minor in American Sign Language studies

Technology & Tools

Languages
Ruby, Javascript, HTML, CSS, SQL

Server Frameworks
Rails, Node, ASP.Net, Entity Framework

Client Frameworks React, Vue, Tailwind CSS

Databases and Database Tools Postgres, MySQL, Redis, SSMS, noSQL, Couchbase

Other/Misc Git, Elasticsearch, RabbitMQ, Contentful, EpiServer



Staff Software Engineer | ConvertKit

April 2023 - present

- Designed and built initial version of 3rd-party developer platform, including a new version of the public-facing API and an app store. This enables product offering and revenue growth while minimizing product footprint and maintenance costs
- Migrated microservice responsible for processing 2 billion email opens and link clicks per month to use time-based Elasticsearch (ES) indices with zero downtime and data loss. This enables future data-retention policies to reduce infra spend and zero downtime ES upgrades
- Architected and implemented custom middleware for rerouting, pausing, and dropping
 problematic jobs based on partial arg matching. This allows us to quarantine operations that
 flood our queues and reduce incident risk
- Created automated CI workflow to autogenerate OpenAPI specification and user-facing documentation from the developer test suite to eliminate developer time spent maintaining documentation

Principal Software Engineer | Cloud City

May 2021 - Mar 2023

- Collaborated on algorithm for optimized physical print fulfillment of digital assets which was granted patent US-11782662-B1. This transformed the client's business by providing a unique value proposition for customers looking for fast and reliable direct mail solutions
- Implemented challenge-response test using IETF's new Privacy Pass protocol, hcaptcha verification, and rate limiting to prevent bot and malicious traffic for RubyGems
- Led development effort for <u>replatform of a customer-facing dashboard</u> from a legacy frontend framework to a modern framework prioritizing web accessibility best practices. Built reusable <u>datepicker</u> and <u>dropdown</u> components ready to be open-sourced by client
- Architected incremental refactor of multi-lambda PDF rendering system with an added layer of abstraction to protect from upstream regressions and breaking changes

Engineering Manager / VP | Tandem

Mar 2019 - May 2021

- Balanced hands-on keyboard software development responsibilities with management responsibilities in a 50/50 commitment
- Ensured on-time, on-budget delivery for our projects by identifying and mitigating complex project and team risks; served as escalation point and ultimate decision-maker in these cases
- Coached team on client engagement, consulting, and technical decision-making skills

Principal Software Engineer | Tondem

Dec 2017 - Feb 2021

- Led an 8-person development team building custom cloud software for a large government client to replace 65+ on-premise deployments of legacy application. This reduced hardware costs and contributed to reduced decision-making costs of nearly \$1B/year due to unified digital records
- Upgraded legacy Rails application and optimized performance of ActiveRecord queries to effectively scale and support revenue targets
- Collaborated with design lead and product owner to set feature roadmap and determine priority and timeline for dependent and intersecting features

.NET Developer | Chamberlain Group

June 2017 - Dec 2017

- Developed and maintained message-oriented middleware system for connected IOT devices
- Refactored monolithic service into 20+ microservices for device communication to simplify maintenance and code dependencies and make downstream event management more flexible

For a full resume of past experience, please visit <u>mercedesbernard.com/resume</u>



Speaking

Come On In! RailsConf 2022

Trust At Scale CTO Summit 2022

Coaching Through Coding RubyConf 2020

Individualizing Your Management CTO Summit 2019

For other past speaking engagements, please visit mercedesbernard.com/speaking