

# Mercedes Bernard

 mercedesbernard@gmail.com



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



## Experience

### Staff Software Engineer | ConvertKit

April 2023 - present

- Support platform stability of distributed system responsible for sending over 2.5B emails/month
- Designed and built a new version of public-facing API prioritizing API standards, performance, and scale to enable third-party developers to build apps and plug-ins for the platform
- Created automated CI workflow to autogenerate OpenAPI specification and user-facing documentation from the developer test suite to eliminate developer time spent maintaining documentation
- 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 and zero downtime ES upgrades.
- Designed and implemented an easily extensible authorization layer for managing multiple access control models (RBAC, ABAC, RuBAC) used throughout the system, including in the frontend, backend, and distributed workers.
- Architected and implemented custom Sidekiq middleware for rerouting, pausing, and dropping problematic jobs based on partial arg matching. This allows us to quarantine operations that flood our queues without the manual queue juggling that used to be required.

### Principal Software Engineer | Cloud City

May 2021 - Mar 2023

- 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 team of globally distributed developers to build a commerce compliance platform using Rails 6, Stimulus, Turbo
- Led development effort for replatform of a customer-facing dashboard from AngularJS to Vue3
- Coached frontend team on web accessibility best practices and built reusable datepicker and dropdown 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 | Tandem

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
- Upgraded legacy Rails application from 4.2.7.1 to 5.2 and optimized performance of ActiveRecord queries to be able 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 [mercedesbernard.com/resume](https://mercedesbernard.com/resume)



## 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](https://mercedesbernard.com/speaking)

