

## SKILLS

**Languages, Frameworks and Tools:** Ruby (Rails, RSpec, Cucumber), JavaScript (TypeScript, React, Redux, Next.js, Node.js), Python (TensorFlow, Pandas, scikit-learn), C# (.NET), SQL (PostgreSQL, MySQL), Java (Maven), Go, R, HTML, CSS, GraphQL.

**Cloud and DevOps:** Kubernetes, Docker, Amazon Web Services (RDS, SQS, S3, ECS, EC2, EKS, MSK, SSM and more), Google Firebase, Prometheus, OpenTelemetry, Sumologic, Terraform.

**Software Architecture:** Microservices Architecture, Software System Design, Arc42 Architecture Standard, C4 Diagramming Model, Mermaid Diagramming Language.

## EXPERIENCE

### Staff Applications Engineer

#### Medidata Solutions, a Dassault Systèmes company

April 2023 - Present

- \*Team leader of 5 other engineers building a new Java-based, Kafka-integrated service on a deadline
- \*Implemented two APIs in C#/.NET in the oldest and most important app at the company
- \*Organized design discussions across departments to deliver a new service supporting 2 important apps
- \*Created designs and architecture documentation using Arc42 conventions and the C4 model
- \*Coordinated implementation in 3 languages (Ruby, C#, Java) across 6 repositories and 3 departments
- \*Mentored 3 junior engineers and collaborated with two senior engineers via code review and pairing
- \*Added Prometheus metrics to a Go service and contributed to three Go repositories via code review
- \*Conducted a proof of concept for a Lambda-based approach to handle a high-volume Kafka stream, involving pricing and throughput estimates, creation of Terraform IAC templates, and networking

### Applications and Senior Applications Engineer, Medidata Solutions

April 2019 - April 2023

- \*Trained a deep neural network on a dataset on the order of 10,000 data points, based on production customer data, and achieved strong precision, recall and F1 scores for 7 separate predictors
- \*Wrote Python scripts using Pandas and scikit-learn to do EDA and to train the model
- \*Led procurement effort of a Feature Flagging tool: RFP, POCs, pricing negotiations, executive presentations
- \*Spearheaded the rollout of the tool across dozens of teams, including writing internal helper functions
- \*Created a ruby gem for container autoscaling based on application metrics and deployed it to production
- \*Designed and implemented custom AWS ECS auto-scaling in an application serving >1 million users
- \*Worked with a team of 4 engineers to maintain, develop, test, and deploy three RoR codebases

### Lab Manager and Research Assistant

#### The Clinical and Affective Neuroscience Lab at Brown University

Jan 2014 — May 2018

- \*Hired and managed 50+ undergraduates and graduate students working on 15+ projects over 3 years.
- \*Created automated graphs using R to display clinical progress for 75+ participants in a 3-year trial.
- \*Managed spreadsheets and combined data from nearly 200 academic papers for a meta-analysis

## EDUCATION

**Harvard University: Extension School**, Cambridge, MA. [Transcript](#)

Spring 2023

**Coursera Online**

2020-2022

[Mathematics for Machine Learning](#) (3 courses), [Machine Learning](#) (3 courses).

**App Academy**, New York, NY.

Nov 2018 — April 2019

**Bennington College (BA)**, Bennington, VT. Concentrations: Psychology & Drama

2008 - 2013