

SKILLS

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

Cloud and DevOps: Amazon Web Services (RDS, SQS, S3, ECS, EC2, EKS, MSK, SSM, IAM, Lambda, Cloudwatch, Step Functions), Kubernetes, Docker, Google Firebase, Prometheus, OpenTelemetry, Sumologic, Terraform

Software Architecture: Microservices Architecture, Arc42 Architecture Standard, C4 Diagramming Model, Mermaid Diagramming Language

EXPERIENCE

Staff Applications Engineer

Medidata Solutions, a Dassault Systèmes company

Apr 2023 - Present

- Led a 5-engineer backend team building a Java application, including APIs, database, Kafka streaming
 - Identified risk due to a 1-month pre-release timeline and wrote APIs in C#/.NET to enable MVP delivery
 - Created end-to-end system design: 7 database tables, 3 APIs, and 4 Kafka-topic messages processors
- POC'd a Lambda-based Kafka stream processor for a 1 million message-per-day stream, involving scaling and pricing estimates, networking troubleshooting, and presentation to executive leadership

Senior Applications Engineer, Medidata Solutions

Apr 2021 - Apr 2023

- Trained a 7-output neural network on >10,000 data points, using python, Pandas and scikit-learn
 - Achieved strong precision, recall and F1 scores, including >95% accuracy top-3 prediction for 6 outputs and presented findings to data science, architecture, and engineering executives
- Led procurement of a Feature Flagging tool: RFP, POCs, pricing negotiations, presentations, rollout
 - Reduced feature delivery duration to <10 seconds from ~20 minutes, allowing teams to move faster
- Implemented APIs, models, DB, caching, async backgrounded workflows, and notifications for a feature that I designed serving >100 thousand users, and deployed to production
 - Built a caching layer to avoid 1 second API calls for a high-volume workflow to execute more quickly
- Guided 2 engineering teams on a feature shifting the core data model of a high volume legacy app

Applications Engineer, Medidata Solutions

Apr 2019 - Apr 2021

- Led the feature delivery of a user landing page supporting customers with ~900k legacy users to migrate to a new platform
- 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 3 Ruby on Rails codebases

Lab Manager and Research Assistant

Brown University, The Clinical and Affective Neuroscience Lab

Jan 2014 — May 2018

- Hired and managed 50+ undergraduates and graduate students working on 15+ projects over 3 years
- Used MATLAB, SPSS, R, and spreadsheets to analyze data, compute statistics, and create graphs
- Ran core aspects of a 5-year clinical trial, including participant enrollment, diagnosis, and assessment

EDUCATION

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

Spring 2023

Coursera [Math for Machine Learning](#) (3 courses), [Machine Learning](#) (3 courses)

2020-2022

App Academy, New York, NY.

Nov 2018 — April 2019

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

2008 - 2013