JAY CUI

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PROFESSIONAL EXPERIENCE

MLOps Engineer Sep 2022 – Jul 2024

BENlabs

- Reduced ML service deployment time by **80%** by automating linting, testing, and infrastructure provisioning in CI/CD pipelines (GitHub Actions, pylint, pytest, AWS Cloud Development Kit)
- Reduced ML workflow setup time by **50%** by turning the workflow into a template and making the template autogenerated (Metaflow, BentoML, projen)
- Reduced tech debt for all data teams by **50%** by migrating legacy services from Bitbucket to GitHub and reconfiguring them (GitHub, Bitbucket, projen)
- Reduced ML application debugging time by 20% by coaching the data scientists on software engineering best practices
- Provided company-wide access to up-to-date vector embeddings by building two self-updating data pipelines (Python, Databricks, Dagster, Hugging Face, Pinecone)
- Enabled data scientists to train ML models on GPUs by writing a bash script that automates remote cloud workstation setup and configuration (shell scripting, SSH, Linux, git, Docker)
- Unblocked data scientists from CI/CD and deployment failures by troubleshooting their ML applications (AWS)

Frontend Software Engineer Intern

May 2022 - Aug 2022

Neighbor Storage, Inc.

- Enabled users to create and update rental listings and payment information by building **10**+ UI components and **2**+ API endpoints (HTML, Tailwind CSS, React with TypeScript, Go)
- Launched UI-Kit Version 2 by building 10+ reusable, fully-tested React components (React Testing Library)

Backend Software Engineer Intern

May 2021 - Jul 2021

Pluralsight, Inc.

- Accelerated user data load time by 67% by redesigning the table concatenation procedure (SQL)
- Provided new content access to 17,000+ enterprise customers in 180+ countries by integrating 50GB of data into Pluralsight's insights & analytics platform (SQL, C#, integration testing)

RELEVANT SKILLS

DevOps & MLOps

Shell Scripting | CI/CD with GitHub Actions | Cloud Computing with AWS | Infrastructure as code (IaC) with AWS Cloud Development Kit (CDK) | Containerization with Docker | Model Training with Metaflow | Model Serving with BentoML

Software Development

Backend Development with Python, Java, C#, C++ | Frontend Development with TypeScript, React.js, TailwindCSS, HTML | Automated Software Testing with pytest, React Testing Library

Data Science

Data Querying with SQL, Databricks | Data Pipeline Orchestration with Dagster | Vector Database with Pinecone | Exploratory Data Analysis (EDA) with NumPy, Pandas, Matplotlib, Seaborn | Machine Learning with scikit-learn, PyTorch

EDUCATION EXPERIENCE

Brigham Young University

Sep 2019 – Jun 2023

- B.S. in Mathematics, Applied & Computational Mathematics Emphasis (ACME)
- Minor in Computer Science
- Heritage Scholarship: merit-based half-tuition scholarship