

JAY CUI

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PROFESSIONAL EXPERIENCE

ML Platform Engineer

Sep 2022 – May 2024

BENlabs

- Reduced ML workflow setup time by **50%** by turning the workflow into a template and making the template auto-generated ([Metaflow](#), [BentoML](#), [projen](#))
- 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 application debugging time by **20%** by coaching the data scientists on software engineering principles and best practices
- Reduced tech debt for all data teams by **50%** by migrating legacy services from Bitbucket to GitHub and reconfiguring them with projen
- Provided company-wide access to up-to-date vector embeddings at all times 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 configures remote cloud workstations and installs dependencies in them (shell scripting, SSH, Linux, git, Docker)
- Unblocked data scientists from CI/CD and deployment failures by troubleshooting their ML applications

Frontend Software Engineer Intern

May 2022 – Aug 2022

Neighbor Storage, Inc.

- Enabled users to create and update rental listings and payment information by building UI components (HTML, [Tailwind CSS](#), React with TypeScript) and API endpoints (Ruby on Rails, 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#)

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

VOLUNTEER EXPERIENCE

Volunteer <i>Huntsman Cancer Institute</i> <ul style="list-style-type: none">Working on art projects with 50+ cancer patients and their families	Mar 2024 – present
Vice President <i>Society for Industrial and Applied Mathematics (SIAM), BYU Chapter</i> <ul style="list-style-type: none">Organized, advertised, and hosted 10+ recruiting events for 600+ undergraduate students in STEM	Sep 2021 - Nov 2022