JAY CUI

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PROFESSIONAL EXPERIENCE

MLOps Engineer   **Sep 2022 – Jul 2024**
BENlabs
- Decreased ML workflow setup time by 80% by turning the workflow into a template and making the template auto-generated (Metaflow, BentoML, projen)
- Decreased ML service deployment time by 50% by automating linting, testing, and infrastructure provisioning in CI/CD pipelines (GitHub Actions, pylint, pytest, AWS Cloud Development Kit)
- 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)
- Reduced tech debt and resolved package incompatibility by migrating legacy services from Bitbucket to GitHub (GitHub, Bitbucket, projen)
- Increased ML application code quality and decreased debugging time by coaching the data scientists on software engineering best practices

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