# Ganyu (Bruce) Xu

Software Engineer, Data Platform



### **Skills**

### **Data engineering**

- Python
- Apache Airflow
- pandas
- SQLAlchemy ORM
- Jupyter

#### Cloud infrastructure

- Docker
- AWS EC2, S3, ECS
- DataDog

#### **Database & DWH**

- AWS Athena
- MySQL & PostgreSQL

#### Web development

- · Flask & Django
- HTML 5 & CSS 3
- JavaScript ES6
- UNIX shell scripting
- Linux (Debian, CentOS)
- RabbitMQ
- NginX
- Go

## **Education**

### **UC Berkeley**

Aug 2015 - May 2019 **B.A.** Mathematics **B.A. Statistics** 

GPA 3.464

### **Experience**

#### **Data Engineer**

LeanTaaS Inc.

July, 2019 - Present

Santa Clara, CA

- Onboarded new customer worth more than \$300k in annual revenue
- Shortened customer onboarding from 12 to 4 weeks by building horizontically scalable backend microservice that automates raw data schema validation
- Accelerated development cycle by provisioning on-demand AWS infrastructure that enables developers to validate individual git branches in sandboxed testing environment
- Automated unit testing by integrating pytest into deployment pipeline
- Maximized Airflow task concurrency (up to 2000) by contributing to and applying in-house Airflow Fargate executor plugin
- Increased on-demand ETL service availability by introducing DataDog for monitoring performance metrics and service outage
- Halved production Airflow task scheduling wait time after identifying performance bottleneck and resizing appropriate cloud infrastructure

## **Software Engineering Projects**

### **Chives exchange**



- Implemented stateless order matching engine that receives orders from RabbitMQ and writes transactions to SQL database
- Implemented web UI using Flask, featuring simple user authentication, simulated stock trading, and market information with interactive stock chart

### **PyArchive**



Django WebSocket AWS S3

- Implemented hybrid cloud file backup solution in which user uploads file through a web interface to a local caching device, which further backs up the file to AWS S3 in the background
- Achieved effective disaster recovery using multipart file upload/download such that large file transfer can be interrupted with minimal progress loss
- Integrated WebSocket into webserver and enabled admin users to execute custom Python script and receive real-time console output

### Simple resume generator



JavaScript HTML/CSS

- Simplified resume writing using JavaScript and HTML for layout and templated JSON for content
- Rendered this resume that you are reading now