

# Ganyu Xu

software engineer

📞 626-327-8890

✉ xuganyu96@gmail.com

📱 xuganyu96

🌐 /in/ganyu-bruce-xu

## Skills

- Rust
- Python 3
  - pandas
  - SQLAlchemy ORM
- Apache Airflow
- Amazon Web Services
  - Compute (EC2, Lambda)
  - Storage (S3, EBS)
  - Container (ECS, Fargate)
  - Database (MySQL, PostgreSQL)
  - Analytics (Kinesis, Athena)
  - Security (KMS, Secrets Manager)
  - CI/CD (CodeDeploy, Beanstalk)
- Docker containers
- Shell scripting
- Web development
  - Flask, Django
  - HTM, CSS, JS, Bootstrap 5
  - Static site generation (Jekyll)

## Education

UC Berkeley

Aug, 2015 - May, 2019

B.A. Statistics

B.A. Mathematics

GPA: 3.464

## Professional Experience

Senior software engineer, data platform

July, 2019 - Sept, 2023

LeanTaaS Inc.

Santa Clara, CA

- **Automated business analytics and legacy manual workflow** for perioperative management in 100+ healthcare systems throughout the US
- **Improved ETL pipeline scalability** by migrating data ingestion from PostgreSQL to AWS S3 and moving Airflow's workers to AWS ECS + Fargate
- **Accelerated enterprise customer onboarding** by automating labor-intensive tasks and cutting onboarding timeline from 4 months to 1 month
- **Increased developer productivity** by containerizing development environment, building unit testing framework, and integrating CI/CD practices
- **Reduced data-related production incidents and pipeline downtime** by implementing service availability monitoring and engineer on-call alarms via DataDog
- **Led a team of 7 software engineers** and mentored several junior developers through project design and implementation review and technical workshops

## Open source contributions

### RustCrypto/crypto-bigint

- (PR #489) Implemented constant time arithmetic for heap-allocated big integers

### Apache Airflow

- (PR #32707) Fixed improper multiprocessing exception handling that causes Airflow scheduler to become zombie while the scheduler health checks become unresponsive
- (PR #32385) Fixed incorrect DagRun list view serialization that causes the webapp to crash when DagRun config is not JSON-serializable
- (PR #31836) Implemented user-specified retries for 'airflow db check'

### rustls

- (PR #1328) Identified Google's incorrect TLS termination procedure and fixed rustls' demo binaries to connect to other properly working TLS server

### PyAthena

- (PR #446) Fixed improper eager type hints evaluation that breaks compatibility between PyAthena and newer versions of SQLAlchemy

### Asymmetric two columns (A2C)

- Abstracted resume format and styling into a Jekyll theme built on Bootstrap 5
- **This resume you are reading** is built using A2C