



# Ziteng Cheng

Los Angeles, CA

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## Education

University of California, Los Angeles, B.S. Statistics and Data Science

Class of 2026

## Employment

### Math Tutor

Fed 2024 - Jun 2024

Delivered over 40 personalized tutoring sessions, analyzing students' performance data to identify knowledge gaps and adjust lesson plans.

Designed tailored study plans and practice sets, leading to an average 15% improvement in exam scores among students over a 16-week period.

### Operation data Analyst

Jun 2024 - Sep 2024

Designed and implemented SQL queries to track daily KPIs (on-time rate, average delivery time, cost per shipment), enabling data-driven decision-making for a 3-person dispatch team.

Developed a predictive scheduling model based on historical demand data, reducing average delivery delays by 23.1% and improving resource allocation efficiency

### Data Analysis Intern

Jun 2025 - Aug 2025

Built and automated Tableau dashboards and client-facing reports that visualized real-time occupancy data from 100+ IoT sensors, enhancing operational visibility and decision-making efficiency by 30%.

Developed and maintained end-to-end data pipelines transforming 1M+ raw IoT data points daily into cleaned, aggregated datasets used for executive dashboards

## Project

### Federated Lasso Regression with Coordinate Descent

Spring 2025

Implemented from scratch a coordinate descent algorithm for Lasso regression in R, including custom soft-thresholding and convergence criteria.

Tuned the regularization parameter  $\lambda$  via validation loss across three independent datasets (600 predictors each); reported non-zero coefficient indices and test loss for each model.

Designed a federated learning framework where three data owners iteratively performed local Lasso updates and shared only model coefficients with a trusted aggregator, ensuring data privacy.

### Regression Modeling of Amazon Order Totals

Summer 2025

Built supervised learning models to predict log-total Amazon order amounts using a dataset of ~5,000 customers across states and months

Produced a fully reproducible R pipeline with annotated scripts and a technical report detailing diagnostics, limitations, and potential improvements