

# ALEX TSUI

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San Jose, California  
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## OBJECTIVE

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To contribute as software engineer developing cloud-based systems that deliver value to users as well as the team.

## EXPERIENCE

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### Backend Engineer Lang-8, Inc

January 2017 – Present  
*Tokyo, Japan*

- Developed APIs and features for Ruby on Rails monolith supporting both web and app users of a language Q&A platform with 8M users/10k daily active users globally
- Deployed instrumentation to identify anomalous latency during traffic spikes, optimizing RDS MySQL database performance to improve site reliability and user experience
- Collaborated with machine learning team to design and integrate Flask microservice to generate LLM completions, serving AI response feature to hundreds of paid users
- Supported data analysis and machine learning teams by deploying logging and ETL scripts, providing data for dashboards, model building, and exploratory data analysis
- Cut AWS compute costs by over 30% by rebuilding and consolidating on new backend Linux AMI, and consolidating and right-sizing EC2, database, and cache resources
- Reduced data transfer costs by 20% by refactoring React/JS and code splitting webpack files in high-traffic web pages
- Designed and built in-house invoice system to facilitate language teacher billing management, streamlining back office workflow for 10+ staff and teachers

## SKILLS

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- Languages: Ruby, MySQL, JavaScript/TypeScript, Python, Bash, Go, C++, Java
- Frameworks/Libraries: Ruby on Rails, React
- Tools/Platforms: AWS, Redis, Elasticsearch, Github, CircleCI, Docker, Terraform, CDK

## EDUCATION

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### University of California, Davis

September 2010 – December 2016

- Ph.D. in Computer Science
- Biogeometry/Medical Image Processing

### San Jose State University

September 2005 – June 2010

- B.S. in Computer Science, B.S. in Applied Mathematics