# Zach (Zuqi) Li

**Software Engineer** | University of Waterloo

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## EXPERIENCE

### Apple | Senior Software Engineer
**Nov 2021 - Present | Seattle, WA**
Rust, Java, Cassandra, Kubernetes, Docker, Oracle DB, Trino, Pkl

- Building the next generation of **App Processing** — ingests, analyzes, optimizes, secures, and prepares **~1.8M active apps** for distribution; backing **>34M** devs and **>4B** daily distributions
- Architected distributed systems to scan, extract, and serve application builds' **bundles** data; exposing key info supporting all **~1.8M active** + unreleased apps' lifecycles in the App Store
  - Worked closely with stakeholders and clients across the org to ensure successful launch

### Microsoft | Software Engineer II
**Sept 2018 - Oct 2021 | Redmond, WA** (Intern @ Sept 2017 - Dec 2017)
C#, Python, Scala, Spark, Azure, ML.NET, TensorFlow, Databricks, TypeScript

- Led the development of **Shopping Newsletters**, the system that brought personalized products to **millions** of shoppers weekly through email
- Built the **Unified Shopping Recommender** service, providing a consistent personalized shopping UX across offerings — from within Windows, to the Edge browser, to Bing & MSN
- Developed **Bing for Commerce** to bring intelligent autosuggest for clients' private datasets
- Shipped core **Bing Autosuggest** ML models: **language models** powering **next word prediction** boosting coverage by **>20%**, **defect classifiers** cutting bad suggestions by **>15%** without compromizing core metrics, and various rankers incorporating new signals and data

### LinkedIn | Data Infrastructure Intern
**Jan 2017 - Apr 2017 | Sunnyvale, CA**
Java, Kafka, MySQL, Ambry

- Helped launch LinkedIn's **media infra** for ingesting and processing all digital assets sitewide
- Designed & built the infra's distributed **end-to-end validation**/**performance testing** platform
  - Runs experiments, monitors failures, reports/validates metrics for all media infra teams

### Yahoo! | Software Engineering Intern
**May 2016 - Aug 2016 | Sunnyvale, CA**
Node.js, React, Fluxible, MySQL, AWS, Chai, Mocha

- Created **Yahoo! View** as part of the web team; hosted **thousands** of TV shows and movies
- Built interactive components and added search functionalities using **AWS CloudSearch**
- Integrated **Tumblr** content into Yahoo! View to show relevant official and fan posts

## PROJECTS

**Guest Lecturing** | University of Toronto | Ranking Models, Feature Engineering      April 2024

Guest Lectured **INF482 - Information Studies II: AI**; discussed applications of machine learned rankers; training, deploying, and testing in production; career development in AI

**KaeSwap** | Website | Next.js, Apollo GQL, Flask, Postgres, AWS S3, Docker      Dec 2018 - Jan 2021

A platform for fans to trade and resale their albums/posters/merch; received **thousands** of page views and **hundreds** of concurrent active users during the KCON LA event

## Languages
- Rust
- Java
- Python
- C#
- C++
- JavaScript
- SQL
- Scala
- HTML + CSS

## Frameworks
### Web
- React + Next.js
- Apollo GraphQL
- Express
- Flask
- Redux
### Data
- Spark
- Trino
- ML.NET
- Hadoop
### Application
- Android SDK
- .NET
- Unity
- Unreal Engine
- OpenGL

## Databases
- Cassandra
- PostgreSQL
- MySQL
- Oracle
- MongoDB

## Tools
- Node.js
- Docker
- Kubernetes
- AWS
- Microsoft Azure
- Firebase
- Git + SVN
- Jupyter
- Vim

## University of Waterloo
**Bachelor of Software Engineering**
Honours with Distinction
Sept 2013 – Apr 2018