Zach (Zuqi) Li

Software Engineer | University of Waterloo

🌐 https://zuqi.li
📞 (206) 724 3286
✉️ lizuqiliang@gmail.com
⭐ github.com/zuqini
💼 linkedin.com/in/zuqili

EXPERIENCE

Microsoft | Software Engineer

Sept 2018 - Present (Prev. Sept 2017 - Dec 2017) | Redmond, WA
C#, Python, TypeScript, TensorFlow, ML.NET, LINQ

- Designed, trained, and integrated a new **autosuggest ranker** into the Chromium-based Edge browser; metrics show **parity** against Chrome autosuggest
- Built a new service for ranking and serving non-prefix-match autosuggestions; serves **2,500~ QPS per machine** and has a 99.9th percentile latency of **15~ ms**
- Built an **n-gram** and a **recurrent neural network language model** to predict the next words of incomplete user queries
  - Integrated **next word prediction** into Bing autosuggest to show relevant suggestions for uncommon queries; improved overall suggestion coverage by **23%**
- Helped tune and improve the autosuggest relevance of Windows Search Box, legacy Edge, and Bing.com through analyzing user patterns and experimentation

LinkedIn | Data Infrastructure Intern

Jan 2017 - Apr 2017 | Sunnyvale, CA
Java 8, Kafka, MySQL, Ambry

- Helped launch LinkedIn's **media infrastructure** for processing and serving media assets
- Designed, built, and released a distributed **end-to-end validation** and **performance testing** framework for the media processing infrastructure:
  - Handles traffic generation, pipeline monitoring, metrics collection, and data validation
  - Used by media teams for experimentation, analyzing metrics, and failure monitoring

Yahoo! | Software Engineering Intern

May 2016 - Aug 2016 | Sunnyvale, CA
ES6, React, Fluxible, Node.js, MySQL, AWS

- Created and launched **Yahoo! View** *(view.yahoo.com)* as part of the web team; served **thousands** of TV shows and movies
- Built core React components, backend APIs, and integrated **Tumblr** content into Yahoo! View to show relevant official and fan posts
- Setup the entire backend integration testing infrastructure for Yahoo! View

PROJECTS

KaeSwap | Node.js, React, Redux, Firebase
Dec 2018 - Present

A platform for K-Pop enthusiasts to trade and resale albums and merch; had **thousands** of page views and **hundreds** of active users at KCON LA '19 during peak traffic

K-Pop Utility Discord Bots | Node.js, Firebase, Discord API
Aug 2018 - Present

Discord bots that: sorts media into respective channels; stores GIFs into DB and reacts; and reports daily K-Pop news scraped from various sites. Used by **multiple K-Pop servers**.

LUQL | Node.js, React-Native, MobX, Firebase
Jan 2017 - Sept 2017

A mobile platform for locals and tourists to post, discover, and book tours around their area

MelonWatch | C++, OpenGL, OpenAL
Aug 2017

A 3D OpenGL first-person shooter; built completely from scratch featuring dynamic shadow mapping, particle system, and physics engine

SKILLS

Languages
- JavaScript
- Python
- Java
- C#
- Scala
- C++
- C
- GraphQL
- HTML / CSS
- ARM Assembly

Frameworks
- TensorFlow
- React / React Native
- Redux
- MobX
- Angular
- Express
- Less / Sass
- OpenGL
- Android SDK

Databases
- MySQL
- PostgreSQL
- MongoDB

Tools
- Spark
- Hadoop
- Kafka
- Node.js
- Firebase
- Git
- Maven
- Jupyter Notebook

EDUCATION

University of Waterloo
Bachelor of Software Engineering
Sept. 2013 – April. 2018

INTERESTS
- Build apps
- Make music
- Catch pokémon