# Zach (Zuqi) Li

Software Engineer | University of Waterloo

# 

- **(**519) 729 8365
- ✓ lizuqiliang@gmail.com
- github.com/zuqini
- in linkedin.com/in/zuqili

#### **EXPERIENCE**

#### Microsoft | Software Engineer

September 2017 - December 2017 | Redmond, WA Python, C#, TensorFlow, LINQ, MS Cosmos (Internal Data Processing Platform)



- Built an n-gram language model using past Bing queries to predict the next words of incomplete user queries
- Integrated **next word prediction** into **Bing**'s autosuggestion pipeline to show relevant suggestions for uncommon queries; improved overall suggestion coverage by **23**%
- Prototyped a recurrent neural network language model to further improve prediction relevance; model captures semantic relationships and long-term dependencies

#### **LinkedIn** | Data Infrastructure Engineer

January 2017 - April 2017 | Sunnyvale, CA Java 8, Kafka, MySQL, Ambry



- Helped launch LinkedIn's media processing infrastructure for processing, managing, and serving digital media assets
- Designed, built, and released a distributed end-to-end validation and performance testing framework for the media processing infrastructure. Framework is:
  - Configurable with custom user logic and handles: traffic generation, pipeline monitoring, quality/latency metrics collection, and data validation
  - Used by media teams for performing experiments, analyzing key metrics, and monitoring for failures

# Yahoo! | Software Engineer

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



- Created and launched Yahoo! View (view.yahoo.com) entirely within 7 weeks as part of the web team; built core UI components and API endpoints
- Optimized APIs and helped integrate AWS CloudSearch for improved performance; reduced avg response time to under 200ms and increased max QPS capacity by 30x
- Integrated Tumblr into Yahoo! View to provide official and fan posts related to shows
- Setup the entire backend integration testing infrastructure for Yahoo! View

# **PROJECTS**

LUQL | Node.js, React-Native, MobX, Firebase

January 2017 - Present

A platform to help locals create and guide tours for travellers, tourists, and adventurers

MelonWatch | C++, OpenGL, OpenAL

August 2017

An OpenGL FPS; built the entire game engine from scratch featuring dynamic shadow mapping, a particle system, and a physics engine

Angora | Node.js, Angular, MongoDB, Jade/Pug, Less

January 2016

A platform where users explore various hairstyles and review local hairstylists

Terre | C++, Cocos2d-X

February 2015

A physics simulation sandbox for building star systems with dynamic lighting effects

#### **SKILLS**

#### Languages

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

#### Frameworks

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

#### **Databases**

- MySQL
- PostgreSQL
- MongoDB

#### Tools

- Spark
- Hadoop MapReduce
- Kafka
- Node.js
- Firebase
- Git
- Maven
- Webpack

# **EDUCATION**

#### University of Waterloo

Bachelor of Software Engineering Sept. 2013 – April. 2018

### **INTERESTS**

- Build apps
- · Make music
- · Catch pokémon