

# Zizhen (Kevin) Song

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(206)422-0785 | zizhensong@gmail.com | zizhensong.com | linkedin.com/in/zizhen-song/ | github.com/songziz

## Experience

### WEB APPLICATION DEVELOPER | UW TRANSPORTATION SERVICES | MAY 2019 – MARCH 2020

- Designed and developed a web application that organizes pictures of parking spots on the University of Washington campus into an interactive map using HTML, CSS, and JavaScript
- Set up and deployed ETL pipeline for data transfer and storage on UW servers using Python
- Implemented Agile development methodology by facilitating exercises such as sprint planning and weekly customer feedback review

### IMAGE-PROCESSING LAB ASSISTANT | UW CELL BIOMECHANICS LAB | MAY 2019 – JANUARY 2020

- Researched image processing techniques for analysis of heart tissues and platelet mechanics to understand causes of heart disease
- Automated biological image analysis by segmenting fluorescent protein imaging of platelets using morphological opening, and flood-fill operations
- Calculated contractional force of platelet cells through displacement evaluation of proteins in contact using MATLAB proprietary programming language

## Education

### UNIVERSITY OF WASHINGTON | SEATTLE, WA | EXPECTED GRADUATION: DECEMBER 2021

- Bachelor of Science in Computer Engineering, GPA: 3.8/4.0
- Related coursework:
  - Algorithms
  - Artificial Intelligence
  - Database Systems
  - Data Structures & Parallelism
  - Software / Hardware Interface
  - Software Design and Implementation
  - Systems Programming
  - Web Programming
- Honors/Awards: Dean's List (6 quarters)

## Projects

### RADIUS | GEOFENCED VIRTUAL WAITING ROOM | JULY 2020 – CURRENT

- Winner of Husky Tech Summer Program's Innovation category
- Implemented full stack React and Firebase application for streamlining customer traffic flow
- Provides business side reassurance with geofenced queue-entry customer App
- Developed real-time communication channel between businesses and customers with native push notifications and direct messages
- Reduced code base redundancy by 30% by implementing REST API in Node.js

### QUESTION PRO | ONLINE STUDY APPLICATION | MAY 2020 – JUNE 2020

- Developed and deployed quiz-based study tool using React and Firebase
- Designed NoSQL database for storing quizzes and tracking personal progress

### LONGEST CHIMNEY | IOS GAME | MARCH 2017 – FEBRUARY 2019

- Designed and developed iOS platformer game using Construct 2 game engine and GIMP graphics editor
- Compiled using Adobe PhoneGap and published on the iOS App Store
- Get your copy at: <https://apps.apple.com/gb/app/longest-chimney/id1449384671>

## Skills

Languages: Java, JavaScript, TypeScript, C, C++, HTML, CSS, SQL, Python, MATLAB

Technologies: React, React Native, Firebase, Node JS, NoSQL, Linux, Git, AWS