

# Kairui Zeng

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## Skills

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**Programming Languages:** JavaScript, C/C++, Python, HTML, CSS, SQL, Bash, Java, Bootstrap, ReactJS, MongoDB, R

**Tools / Technologies:** Git, Postman, Docker, Jira, Bitbucket, Postico

## Work Experience

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**Junior Software Developer** – Xero Canada Sep 2020 – Dec 2020

- Implemented automatic document collection across 8 banking and telecommunication service providers to increase available account connection options for customers using NightmareJS and PuppeteerJS
- Developed robots to fetch 3000+ financial statements and store via requests into a PostgreSQL database for 1500+ international users for previously unavailable connections
- Upgraded internal framework for status management of 1000+ collection robots by introducing new Express API backend functionality and validated with unit and integration tests using Mocha and Chai

**Web Applications Developer** – Ontario Institute of Cancer Research Jan 2020 – Apr 2020

- Developed automated Express API testing scripts for the entire backend framework of 100+ Express API endpoints in Postman to test functionality and user permission security
- Designed the data model for the collection of 100+ Canadian cancer centres and 1000+ cancer clinical trials to ensure efficient translation between organization databases into MongoDB
- Applied interface improvements for internal sites to improve user experience in ReactJS and Bootstrap

**Software Developer** – University of Waterloo May 2019 – Aug 2019

- Reduced the rendering time of visual data by 50% by optimizing the graphics framework in MATLAB
- Created new data analysis feature and interface for data categorization used by non-technical clients

## Education

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**University of Waterloo** Sep 2018 – Apr 2023

- **Bachelor of Computer Science** – GPA: 3.93/4.0
- **Relevant Courses:**
  - Applied Cryptography | Algorithms | Database Management | Operating Systems

## Projects

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**Hack Western 2019 Winner: The London Bridge** – NodeJS, MongoDB

- Built a reporting application which geotagged images of locations that require maintenance sent in by users and filtered key issues to be sent to public services using PugJS
- Constructed a prioritization algorithm to determine request urgency based on factor analysis of different geographical categories stored in the London Open Data Portal

## Awards

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- Faculty of Mathematics Scholarship for 3 years 2019-2021
- NSERC Undergraduate Student Research Award 2020
- Term Dean's Honour List for 4 consecutive terms 2018-2020
- President's Scholarship of Distinction 2019