Rei Kong

(312) 885-8391 | reiskongs@gmail.com | linkedin.com/in/reikong | github.com/ReiKong

EDUCATION

McGill University

August 2022 - May 2026

Bachelor of Arts in Computer Science & Sociology, Supplementary Minor in Computer Science

- Coursework: Logic & Computational Theory; Object-Oriented Programming; Algorithms & Data Structures; Software Design; Principles of Web Development; Data Science; Statistical Computing; Natural Language to Data Science; Database Systems; Probability & Statistics; Algorithm Design; Functional Programming
- Activities & Societies: Hack4Impact; CodeJam Hackathon Committee; Social Studies of Computing Research Group; Peer Tutoring; McGill Design Consultancy; World Vision
- Awards: \$3000 Entrance Scholarship; 4th Place at Create4Good Case Competition

EXPERIENCE

McGill University

August 2025 - Present

Undergraduate Teaching Assistant

 Host office hours, answer technical questions, and create comprehension quizzes and other educational content on Python and data structures for 750+ students

Amazon

June 2025 – August 2025

Software Engineer Intern

- Designed and implemented a modular Java CLI using Picocli to streamline mass service migrations, cutting pipeline migration time from 12 to 10 weeks for 10,000+ engineers
- Led security review and designed backend authentication flow with AWS Cognito and an internal middleware-based authentication system for 2000+ teams
- Diagnosed and remediated a production security issue where external services bypassed dedicated authentication routes, ensuring all protected endpoints enforced required access controls and safeguarding data for 2,000+ teams
- Wrote and presented a system design document to 2 stakeholder groups integrated as team standard

McGill University

October 2024 - December 2024

Research Intern

Authored a 10-page literature review analyzing bias in AI-driven resume screening tools, synthesizing existing research to
identify underlying causes of bias and propose technical and non-technical mitigation strategies

Business-Software.com

October 2023 – October 2024

Software Developer Intern

- \bullet Created a JavaScript Chrome extension search tool, increasing filled-in forms by 100% and reduce search times by 40%
- Leveraged Chrome Extension APIs to automate repetitive tasks, reducing time to input form data by 80%
- Added pagination with Redis caching on the backend to reduce page loading speeds by 60% and server request volume by 50%

Projects

ConUAlerts | GitHub

- Developed a scalable web application notifying 150+ students when spots open in their desired classes via SMS in a team, using React, TypeScript, Go, PostgreSQL, MongoDB, Docker, Twilio, and Microsoft Azure
- $\bullet \ \, \textbf{Collaboratively} \ \text{implemented concurrent scraping and fault-tolerant messaging using} \ \textbf{RabbitMQ}, \ \text{enabling} \ \textbf{40x} \ \textbf{faster} \\ \text{performance across microservices}$

myBookings | GitHub

• Engineered a booking tool with user authentication for McGill students and staff in a **team** using **TypeScript**, **React**, **Node**, **Express**, **PostgreSQL**, **Microsoft Azure**, and **Figma**

LEADERSHIP EXPERIENCE

Hack4Impact McGill

 $September\ 2022-Present$

Executive Director

- Spearhead a team of 50+ members developing software solutions for socially responsible groups, such as Greenpeace, and oversaw 10+ consultations with non-profit organizations
- Oversee 3 product and engineering teams iterating on prototype features, ensuring alignment with user requirements
- Developed UI and backend features for a donations tracker web application using **React**, **TypeScript**, and **Express**, enabling users and non-profits to streamline donation requests and collection

TECHNICAL SKILLS

Programming Languages: Python, Java, TypeScript/JavaScript, C, Haskell, SQL, Bash

Frameworks & Tools: React, Next, Node, JUnit, Git, HTML/CSS, Visual Studio Code, Unix, Stata, Adobe Creative Cloud,

Figma

Cloud & DevOps: AWS (Cognito, CloudWatch)