

# Ju Hong Kim

[linkedin.com/in/ju-hong-kim-zaku](https://linkedin.com/in/ju-hong-kim-zaku) | [zakuarbor.github.io/blog/](https://zakuarbor.github.io/blog/)  
[github.com/zakuArbor](https://github.com/zakuArbor)

## EXPERIENCE

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**Carleton University - Calculus Teaching Assistant** September 2022 - Present

- Guide a class of over 40 students on problems in Calculus

**Blackberry QNX - Student Support Developer** January 2022 - April 2022

- Assisted clients on their technical issues and design questions relating to QNX, POSIX C, and Momentics IDE
- Technical issues ranged from compilation, API/utility usage, networking, and debugging crashes
- **Languages, Tools, and Environment:** C, SVN, Git, GDB, QNX, and Momentics

**IBM Canada - Db2 Build Infrastructure DevOps Developer** July 2020 - August 2021

- Increased productivity of developers by developing, debugging and improving build infrastructure and automation tools to better facilitate the development pipeline
- Mentored interns and junior employees on their work and programming knowledge to further their career and performance
- **Languages, Tools, and Environment:** Perl, Node.js, Python, C, Linux/UNIX, Git, Clearcase, and Jenkins

**IBM Canada - Db2 Build Infrastructure Intern** May 2018 - August 2019

- Monitored Unix and Linux nightly and special builds for Db2 to ensure builds are released regularly
- Improved build infrastructure and automation tools to ensure developers have the latest stable code to improve on
- Supervised in the migration of a server to remove blockers and ensure migration was completed with minimal downtime
- **Languages, Tools, and Environment:** Perl, C, PHP, Clearcase, Linux/UNIX, Jenkins, and Buildforge

**Ericsson - Student Assistance to the Standards Advisor** February 2015 - June 2015

- Assisted in configuration and planned migration of a server
- Maintained and debugged servers and programs to ensure services are available

## PROJECTS

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- Led a team of students to design a passwordless continuous desktop authentication by using a smartphone as a Bluetooth authenticator to replace password-based authentication for convenience
  - Lead developer on the authentication module and background process to continuously authenticate the smartphone via Bluetooth
  - Aided in the development of the Android app to communicate with the desktop via Bluetooth
  - **Technologies and Languages:** C, Kotlin, Linux Bluetooth Library Stack (Bluez), Linux PAM, and D-Bus
- Implemented an assembler, written in C, for a 16-bit architecture to convert Hack assembly to machine code
- Collaborated on a front-end prototype of an existing chemical research patent web app to improve UX by making the UI intuitive and allow users to accomplish their tasks with a minimal amount of actions
  - **Technologies and Languages:** React, Node.js, and SQL
- Implemented a progress report card generator as a potential product for a school to be mobile-friendly and intuitive
  - **Technologies and Languages:** PHP, HTML, CSS, and Javascript

## SKILLS

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- **Systems Programming:** C with exposure to C++ and Rust
- **Web Design:** HTML, CSS, Javascript, PHP, JQuery, React and NodeJS
- **Database:** SQL and NoSQL (MongoDB and Firebase)
- **Scripting Languages:** Perl, Bash, and Regex
- **Other Programming Languages:** Python and Java
- **Version Control:** Git and Clearcase

## EDUCATION

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**Carleton University** September 2021 - Present  
HBSc in Mathematics

**University of Toronto Mississauga** September 2015 - June 2020  
HBSc in Computer Science With Distinction, Overall CGPA: 3.35/4