# Jongjin Jung

(+1) 437-982-3854 | jjjung3571@gmail.com | linkedin.com/in/jongjin-jung | github.com/jongjin-j

## EDUCATION

**University of Toronto**                                                                             Toronto, ON
*Bachelor of Applied Science in Computer Engineering, Minor in Artificial Intelligence*       *Graduated June 2024*

## EXPERIENCE

**Software Developer**                                                                      May 2022 – April 2023
*Oracle Corporation*                                                                                *Toronto, ON*

- Migrated a microservice into an external cloud native application (knative) and deployed as a serverless function, running parallel with the provider that increased scalability and flexibility
- Implemented an event-driven architecture using Apache Kafka to send and receive cloud events between the provider and the cloud native application
- Developed and deployed an API library that enables CRUD operations in Vault in order to manage AES secrets for pod configurations, further enhancing encryption and security
- Developed a faster and user-friendly frontend to replace the old Eloqua UI through TypeScript & React that renders/manages its components, and saving/deleting data to the server
- Wrote automation test cases using Selenium in C# to verify the developed functionalities and meet the required time constraints

**Software Engineer Intern**                                                                    Sep 2021 – Dec 2021
*rapStudy — EdTech startup*                                                                  *Ithaca, NY (Remote)*

- Developed a web and mobile software platform for music-based education in 30+ schools to support teachers
- Conducted real-time data operations on Firebase and structured database security rules for access management
- Developed a standard alignment feature that filters songs based on the NY State educational standards
- Implemented a responsive and dynamic design through conditional rendering and media queries

**Machine Learning Research Assistant**                                                         May 2021 – Aug 2021
*Boston University LISP (Learning, Intelligence, and Signal Processing)*                             *Boston, MA*

- Supervised by Professor Sang "Peter" Chin, developed recurrent neural network models which are biologically plausible that overcome the limitations of backpropagation using the Pytorch library
- Implemented and tested the RNN models on computational graphs of scalar functions and matrix functions
- Assisted in writing an academic paper on biologically plausible models by implementing and testing target propagation and direct feedback alignment
- Participated in ATD to develop anomaly detection algorithms to detect unusual traffic congestion

## PROJECTS

**Monocle (NewHacks Hackathon Winner)** | *JavaScript, Python, React, Firebase, Flask*                Nov 2021

- Developed a software that simplifies privacy policies into data collected and how it's used, highlights subsections with the keywords
- Created frontend to take in user input as a link or PDF of the privacy policy
- Fetched parsed JSON from the backend via axios, then processed and displayed simplified privacy policy data

**GIS Mapping Software** | *C++, GTK*                                                            Jan 2021 – Apr 2021

- Developed a city mapping software in C++ using the OpenStreetMapAPI with two teammates using git version control
- Created a navigation system using pathfinding algorithms (Dijkstra, A* Heuristics)
- Optimized Travelling Salesman Problem using 2-opt, 3opt, and simulated annealing, came 28th out of 100+ teams

## TECHNICAL SKILLS

**Languages**: Java, Python, JavaScript, TypeScript, C/C++, C#, SQL, HTML/CSS, ARM Assembly
**Frameworks**: React, Node.js, Flask, Kafka, Kubernetes, React Native, Gatsby, Selenium
**Other Technologies**: Git, Jira, Confluence, Figma, Teamcity, MongoDB, GraphQL, Firebase, Pytorch