Jongjin **Jung**

Toronto, ON / Boston, MA

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Skills

Languages C, C++, C#, Java, Javascript, Typescript, Python, SQL, HTML, CSS, ARM Assembly
Frameworks React, Node.js, Kafka, Docker, Kubernetes, Express, Gatsby, React Native, Selenium
Other technologies Git, Jira, Confluence, Figma, Teamcity, MongoDB, GraphQL, Firebase, Pytorch

Experience

Oracle — *Toronto, Ontario*

Software Developer Intern - Java, TypeScript, C#, React, Spring, Kafka, Docker, Kubernetes — *May 2022 - April 2023*

- 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

rapStudy | EdTech startup — *Ithaca, New York (Remote)*

Software Engineer Intern - Javascript, React, Node.js, Firebase — *Sep 2021 - Dec 2021*

- Built a web and mobile software platform to help teachers educate kids in schools through music and lyrics in over 30 schools
- Performed real-time data reads and writes on a Firebase database and structured database security rules to manage user access
- 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

Boston University LISP (Learning, Intelligence, and Signal Processing) — *Boston, Massachusetts*

ML Research Assistant - Supervised by Professor Sang "Peter" Chin & PhD Candidate Peilun Dai — *May 2021 - Aug 2021*

- Developed recurrent neural network models which are biologically plausible that overcomes the limitations of backpropagation using the Pytorch library
- Experimented the recurrent neural network 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 (Algorithms for Threat Detection) to develop anomaly detection algorithms to detect unusual traffic congestion

Projects

GIS Mapping Software

C++, GTK [Link for Demo] — *Jan 2021 - Apr 2021*

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

Monocle (NewHacks Hackathon Winner)

JavaScript, Python, React, Firebase, Flask [Link to Devpost] — *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

Education

University of Toronto — *Toronto, Canada*

Bachelor of Applied Science in Computer Engineering — *Graduating May 2024*

- Relevant Courses: Software Communication & Design, Computer Organization, Operating Systems, Algorithm and Data Structures, Signals and Systems, Digital Systems, Programming Fundamentals, Computer Fundamental, Calculus I, II, III