

Jongjin Jung

Toronto, ON / Boston, MA

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Skills

Languages C, C++, Java, Javascript, Typescript, Python, HTML, CSS, ARM Assembly

Frameworks React, Node.js, Express, Gatsby, React Native

Other technologies Git, MongoDB, GraphQL, Firebase, Pytorch

Experience

rapStudy | EdTech startup

Ithaca, New York (Remote)

SOFTWARE ENGINEER INTERN - JAVASCRIPT, REACT, NODE.JS, FIREBASE

Sep 2021 - Dec 2021

- Building a web and mobile software platform to help teachers educate kids in schools through music 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 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

Cocktail Searcher

JAVASCRIPT, REACT, NODE.JS, EXPRESS

Jul 2021 - Aug 2021

- Developed a cocktail searcher that browses through all existing cocktails and view the image, ingredients, and instructions of a cocktail
- Created backend fetching JSON from TheCocktailDB API using Axios which returns parsed data to the frontend
- Used React Router for routing to render dynamic pages based on the requested cocktail

Customizable Blog Template

JAVASCRIPT, NODE.JS, EXPRESS, EJS, MONGODB

Jun 2021 - Jul 2021

- Developed a general blog template with user authentication(JWT) that connects to the user's MongoDB local database
- Utilized Express for the backend to handle retrieving, creating, and deleting blog posts with multer library to handle image uploads
- Created frontend using the EJS view engine to render blog posts and handle user input

Education

University of Toronto

Toronto, Canada

BACHELOR OF APPLIED SCIENCE IN COMPUTER ENGINEERING

Graduating May 2024

- Relevant Courses: 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