

Simon JinLin Cen

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EDUCATION

University of Toronto
Bachelor of Applied Science in Computer Engineering

Toronto, Canada
Expected Graduation: April 2024

WORK EXPERIENCE

Cloud Computing and AI Part-time Assistant

June 2021 – Present

Microsoft

Guangzhou, China

- Converted speech to text from videos using **Azure Logic Apps** and **Video Analyzer**.
- Verified the development process of **Azure Defender for IoT** and published articles and PPT about this latest technology.
- Analyzed best practices for third-party developers to develop user-friendly apps on **Microsoft Teams**.
- Evaluated the feasibility of using **Azure Synapse Analytics** to collect data for Smart City's development projects.

ENGINEERING PROJECTS

To-do App Full-stack Developer

June 2020 – August 2020

www.listnotes.me / www.github.com/simoncen/todo-app

Trello-like mini to-do list full-stack web application that helps 160 active users manage their daily tasks as of this date.

- Developed the **React**-built frontend with components from **Material-UI** and manipulated states with **React-Redux**.
- Used **passport-jwt** to carry out the authorization and authentication process.
- Developed **Rest APIs** with **Express.js** and tested them with **Postman**.
- Engineered the database with **MongoDB** to manage user's to-do lists' data.
- Utilized **Mongoose** library for **Node.js** to access MongoDB.

Easy Map Full-stack Developer

Jan 2021 – April 2021

www.github.com/simoncen/easyMap046

easyMap GIS that helps users explore the world.

- Designed the user interface of the map using **C++ gtk library**.
- Maintained the backend system using **Valgrind**.
- Implemented **A* algorithm** that sped up the pathfinding functionality by 50%.
- Utilized mathematical libraries to develop **Simulated Annealing algorithms** for travelling salesman problem.

Covid-19 Tracker App Front-end Developer

Dec. 2020 – Jan. 2021

www.cvirustracker.tech / www.github.com/simoncen/Covid-19-Tracker

Coronavirus tracking web application that collects data regarding infected, deaths, and recovered cases from over 300 countries and presents them to users through graphics and numbers.

- Built the frontend using **React** along with components from **Material-UI**.
- Designed graphics and animation with **Chart.js** and **react-count-up**.
- Fetched data from <https://covid19.mathdro.id/api> with **axios**.

Portfolio Website Full-stack Developer

Nov. 2020 – Dec. 2020

www.simoncen.ca

Personal portfolio website that allows visitors to view the owner's experience through the presentation of cards and to interact with the owner through email. The website attracts viewers from over 20 cities after it was launched for a week.

- Designed the frontend with animation using **React** and its components from **React-Bootstrap**.
- Used **Express.js** and **Node.js** in the backend for developing **REST APIs** to extract email messages to the server.
- Utilized **SendGrid** to send back the messages to the owner.

TECHNICAL SKILLS

- **Computer Language Skills:** Python, Java, C/C++, JavaScript, HTML, CSS, XML, EJS, MATLAB, Verilog
- **Frameworks/Libraries:** Express.js, React.js, Redux, WebRTC, Socket.io, React-Bootstrap, React Spring, Material UI, Mongoose, Validator.js, Chart.js, Peer.js, React Router, Bootstrap, node.bcrypt.js, jwt-decode, morgan,
- **Database/SW Tools:** Azure, MongoDB, Node.js, Postman, Heroku, Google Analytics, Git, Namecheap, Passport.js, body-parser, CORS, Rebrandly, Datamuse API, Axios, SendGrid API, nodemon, Linux