Simon JinLin Cen

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EDUCATION

University of Toronto   Expected Graduation: April 2024
Bachelor of Applied Science in Computer Engineering   *Toronto, Canada*

WORK EXPERIENCE

Microsoft   June 2021 – Aug. 2021
Cloud Computing and AI Part-time Assistant   *Guangzhou, China*
Verified Microsoft Azure's services to engage with Microsoft's third-party partners as a technical evangelist.
- Evaluated the feasibility of using **Azure Synapse Analytics** to collect data for Smart City's development projects that influenced **447** companies and individuals.
- Verified the development process of **Azure Defender for IoT** for **285** companies and individuals.
- Analyzed app deployment process on **Microsoft Teams** for **579** third-party developers.
- Conducted research on the practicality of Metaverse from both technological and ethical perspectives.

ENGINEERING PROJECTS

Partner Video Chat App Full-stack Developer   July 2021 – Aug. 2021
An easy-to-use video chat app that allows 2 friends to communicate with each other face to face in 2 clicks.
- Enabled fast audio and video connection between client and server using **Socket.io** and **WebRTC API**.
- Established peer-to-peer data connection using **simple-peer**.
- Styled the user interface with the help of **React** and **Material UI**.

easyMap Full-stack Developer   Jan. 2021 – April 2021
easyMap GIS that helps users explore 19 popular regions in the world.
- Designed the user interface of the map using **C++ gtk library**.
- Maintained the backend system using **Valgrind**.
- Implemented **A* algorithm** and **Simulated Annealing algorithms** that sped up the pathfinding functionality by 50%.

Covid-19 Tracker Web Developer   Dec. 2020 – Jan. 2021
Coronavirus tracking web application that collects data regarding deaths, infected cases, and recovered cases from over 300 countries and presents them through graphs and numbers.
- Built the frontend using **React** along with components from **Material-UI**.
- Designed data visualization and animation with **Chart.js** and **react-count-up**.
- Fetched data from https://covid19.mathdro.id/api with **axios**.

To-do App Full-stack Developer   June 2020 – Aug. 2020
Trello-like mini to-do list full-stack web application that helps 172 active users manage their daily tasks.
- 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.

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, Bootstrap, Material UI, Mongoose, Chart.js, simple-peer, Bootstrap, node.bcrypt.js, jwt-decode, pandas
- **Database/SW Tools:** MongoDB, Azure SQL Database, Microsoft SQL Server, Node.js, Azure Synapse, Azure Defender for IoT, Power BI, Logic Apps, Postman, Heroku, Netlify, Google Analytics, Chat Engine, Passport.js, CORS, Axios, Linux, Git

CERTIFICATION

Startup Weekend (partnership with Google for Startups)   Aug. 2021
Champion & Business Model Prize Winner   *Guangdong, China*