Ryan Chang

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Education

University of Toronto Expected: 05/2022

Bachelor of Science, Computer Science Specialist

Relevant Coursework :

- Multivariable Calculus • Visual Computing • Machine Learning • Operating Systems
- Data Structures and Algorithms • Systems Programming • Databases • Web Development

Experience

Facebook | Software Engineering 08/2022 - Now

- Incoming Software Engineer.

Filament AI | Software Engineering Intern 07/2021 - 11/2021

- Built services in **Node.js** using **Knex.js** to facilitate dataflow between client interface and **MySQL** server, leading to a more scalable and maintainable data collection process for an educational platform.
- Developed Chatbot logic for

Filament AI | Software Engineering Intern 07/2020 - 09/2020

- Developed a variety of interactive chatbot functionalities and customized a responsive, WCAG AA compliant chatbot using **Redux** and **React** for a mental health counselling company.
- Implemented several frontend **React** components for an investment pipeline dashboard and dynamic email digest compilation **Node.js** for a private equity fund.

Teaching assistant | CSC148 Introduction to computer science 01/2022 - 05/2022

- Host office hours, help students on class forum, write new exam questions, proctor and grade exams

Programming Skills

- **Languages**: JavaScript, Python, C/C++
- **Tools/Technologies**: Git, React, Redux, Numpy, Scikit-learn, Flask, Jupyter Notebook, PostgreSQL, Node.js, Express, Knex.js, MySQL, MongoDB, Mongoose, Android Studio.

Projects

My-NBA | my-nba.herokuapp.com 11/2020 - 02/2021

- Full stack web application built with **Python** and **React** that explores machine learned based statistical analysis on the NBA.
- Independently developed **Python** based machine learning pipeline using **Scikit-learn** with API end point deployed on Heroku using **Flask**.

Redflags.IO | redflagsio.herokuapp.com 05/2020 - 07/2020

- Multiplayer web party game with real-time updates.
- Utilized **Socket.io** and **Express** for bidirectional communication between server and clients.
- Implemented frontend using **React** and deployed on Heroku.