

Ryan Chang

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Education

University of Toronto

Expected: 05/2022

Bachelor of Science, Computer Science Specialist • Major GPA : 3.57

Relevant Coursework :

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

Experience

Filament AI | Software Engineering Intern

07/2021 - Now

- 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.

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.

Programming Skills

- **Languages:** JavaScript, Python, C/C++, Java
- **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.

RcMeme.Js | [Examples](#)

10/2020 - 12/2020

- Lightweight, dependency-free Canvas based **JavaScript** library used to make create memes that can be embedded in websites.
- Used DOM manipulation to create configurable animations, captions, and audio attachable animations.

Bomber Man Android Game | [Demo](#)

08/2019 - 10/2019

- Android Game in **Java** using the model view presenter architecture.
- Developed classes with clear responsibilities, employed design patterns and OOP principles to keep codebase extensible and readable.