

Danny Lu

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EDUCATION

University of Toronto

September 2021 - May 2025

Bachelor of Science in Computer Science

Toronto, ON

- Relevant Courses: Data Structures and Algorithms, Object Oriented Programming, Software Design
- Extracurriculars: Engineering Student Consulting Association, Google Student Developer Club, CASS Basketball

SKILLS

Languages: TypeScript/JavaScript, Python, Java, SQL, HTML/CSS

Frameworks: React, Angular, Express, Flask, Spring Boot, Jasmine, Jest, Bootstrap, ChakraUI

Libraries/Tools: Node.js, PostgreSQL, MongoDB, Maven, TensorFlow, Scikit-learn, Git, Postman, Jira/Confluence

EXPERIENCE

Software Developer

May 2022 - August 2022

Royal Bank of Canada

Toronto, ON

- Migrated the core eTransfer service to the cloud using **Java** and **Spring Boot**, improving long-term scalability and reducing operating costs by **over 50%**
- Built, extended, and optimized the eTransfer **REST API** endpoints which serve vital services and **over 17 million users** worldwide
- Led the frontend development of the RBC eTransfer UI system using **Angular** and **TypeScript**
- Developed responsive error pages for the main sign-in page and handled unexpected errors with **RxJS**, improving user experience
- Wrote unit tests using **Jest**, providing code coverage for **100%** of the app

Front-End Developer

May 2021 - December 2021

York Region Kiva

Richmond Hill, ON

- Developed a dynamic and user friendly web app, helping to raise awareness and reach our fundraising goal of \$2000
- Led the web app's UI/UX design and development using React and Bootstrap, enabling us to showcase our cause digitally

PROJECTS

Hack the North - MyRecipePal | *React, JavaScript, Node.js, Express, PostgreSQL*

- Engineered a lifestyle web app that helps users decide what to cook by generating personalized recipes
- Designed and developed a user friendly and responsive frontend using **React**, **JavaScript**, and **ChakraUI**
- Created a **RESTful** backend with **Node.js**, **Express**, and **PostgreSQL**, allowing users to manage their recipes
- Implemented a recipe filtration algorithm, enabling users to tailor recipes to their dietary preferences

Hack the Valley - Lookism | *Python, Scikit-learn, React, TypeScript, Node.js, Express, MongoDB*

- Created an app that helps inspire user's fashion style by recommending outfits based on past interests
- Developed the recommendation system using **Scikit-learn** and **Python** to suggest relevant outfits to the user
- Implemented an authentication system for the **MongoDB** database using **JWT** and **Node.js** to protect user data
- Designed a seamless like/dislike feature using **React** and **TypeScript** to improve outfit recommendation accuracy

WinHacks - ScanEats (Winner) | *Python, Flask, TensorFlow, React*

- Built a **hackathon-winning app (200+ participants)** that combines **React**, **Python**, **Flask**, and **machine learning** to determine the freshness of a fruit
- Trained a **TensorFlow** model over a fruits dataset to analyze the freshness of a fruit
- Implemented endpoints with Flask, enabling pictures of fruits to be sent to classification models

Pathfinding Visualizer | *React, TypeScript, Bootstrap*

- Developed an educational visualization app that helps users understand how pathfinding algorithms work
- Implemented pathfinding algorithms using React and TypeScript to generate different routes to a destination
- Simulated real world roads by developing the ability to add obstacles