ETHAN CHEN

EDUCATION

University of Waterloo

Sep. 2024 - May 2029

Bachelor of Applied Science in Computer Engineering

Waterloo, Ontario

EXPERIENCE

Setford Consulting & Technology Ltd.

August 2023 - October 2023

Volunteer Front-End Web Developer

Calgary, Alberta

- · Developed "structure3d.com" using JavaScript to manipulate the DOM and build visual effects, enhancing user engagement.
- · Designed and implemented a responsive, user-friendly interface using TailwindCSS, significantly boosting retention rates.
- · Strengthened communication skills through regular collaboration with clients, ensuring alignment with their requirements.

PROJECTS

Problem Set Assistant | TypeScript, Next JS, React, Redux, TailwindCSS, PostgreSQL, Vercel, AWS S3, AWS Lambda

July 2024

- · Developed a NextJS and React full-stack web application hosted on Vercel that helps the user focus on questions to improve on.
- · Utilized AWS Lambda to process user-uploaded PDFs into images readable by OCR (TesseractJS) stored in AWS S3 buckets.
- \cdot Implemented PostgreSQL to store users and sessions as well as organize user files stored on S3.

To-do list Desktop Application | TypeScript, NextJS, React, Tauri, TailwindCSS

March 2024

- · Developed a desktop application by using Tauri to render a NextJS application in a window.
- · Implemented Todoist API and OAuth to reference a user's to-do list.
- · Used Todoist API to display a user's data as a traditional to-do list or on a calendar.

Real-time Mathematical Rendering Hack the North 2022 Project | C#, .NET Windows Forms

September 2022

- · Developed a desktop application using .NET Windows Forms to render mathematical notation in real-time.
- · Actively learned collaboration capabilities on GitHub with hackathon teammates.
- $\cdot \ \, \text{Improved presentation skills by explaining the project to judges and observing speaking strategies demonstrated by teammates.}$

TECHNICAL SKILLS

Languages: Python, Java, C#, C++, HTML/CSS, TailwindCSS, JavaScript, TypeScript, React, Redux, NextJS, ExpressJS, SQL (Postgres)

Developer Tools: VS Code, VS Community, Eclipse, Android Studio, NodeJS **Technologies/Frameworks**: GitHub, Vercel, AWS S3, AWS Lambda, Tauri, .NET

LEADERSHIP / EXTRACURRICULAR

First Tech Challenge Robotics Team

Fall 2022 - Spring 2024

Lead Programmer

Strathcona-Tweedsmuir School

- · Contributed to increasing the team's divisional ranking by over 15 positions and entering provincial qualifications in less than a year by developing effective Java code for the robot using Android Studio to compete in the autonomous phase.
- · Efficiently and calmly coordinated with teammates during match intermission periods of 5-15 minutes to fix or improve the robot.
- · Adapted to alliance teams by initiating strategic communication before the match to optimize the overall alliance score.

Awards

University of Waterloo President's Scholarship of Distinction

July 2024

Finished Grade 12 with a top 6 course average of over 95%.

University of Waterloo

The Timothy Stiles Memorial Award

June 2024

Awarded for the most outstanding mathematical achievement in senior school.

Strathcona-Tweedsmuir School

The Dr. Dorothy Goldstein Memorial Prize for Senior School Science

June 2024

Awarded for the most outstanding performance in senior school science.

Strathcona-Tweedsmuir School

Canadian Senior Mathematics Contest Certificate of Distinction

December 2023

Ranked in the top 25% of all contestants who took the 2023 Canadian Senior Mathematics Contest.

University of Waterloo