

Daniel Xu

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SKILLS

Languages: C/C++, Java, Python, R, HTML, CSS, Javascript

Frameworks: React, Next.js, Bootstrap, Tailwind CSS, Firebase

Developer Tools: Git, VS Code, PyCharm, IntelliJ, Figma, Eclipse, npm, Google Cloud Platform, Piskel, Github, Data Structures and Algorithms, Object Oriented Programming

Libraries: pandas, Matplotlib, jQuery

EXPERIENCE

Fullstack Web Developer

November 2022 – Present

Discourse Agency

- Created interactive **Privilege Walk API** using **Next.js** and **Tailwind**, as branch of Discourse Agency Website
- Implemented **Firebase** to store previous user responses in **Realtime Database**, and retrieve data to simulate privilege walk with **10 other users**
- Developed algorithm to recommend **9 different** company services including Inclusionary Education and Crisis Response based on questionnaire responses
- Coordinated meetings with design team to devise layouts and functionality using **Figma**, **Github**, and **Zoom**

PROJECTS

CodeMan | Java

July 2022 – Present

- Designed and programmed 'Pokémon' inspired 2D game using **Java**, **JPanel**, **JFrame**, and **Graphics2D**
- Created sprites and tiles with **Piskel**, rendered **70x60 tile** world map with **InputStream** and **BufferedReader**
- Optimized frame-to-frame render time to **0.05s** with delta game loop and FPS limiter, using **java.awt**

Stock Sentiment Analysis | Python, pandas, Matplotlib, Jupyter Notebook

December 2022 - Present

- Generate investment insight for **Facebook** and **Tesla** through sentiment analysis with **Python** and **VADER**
- Scraped **500 news headlines** into DataFrames using **pandas**, represented time-series and day-trade data visualizations with **Matplotlib**
- Programmed algorithm to filter verbatim copied headlines, improving statistical modelling accuracy by **4.8%**

Expense Tracker | React, CSS, Javascript

September 2022 – October 2022

- Built expense tracker web application using **React**, helping users visualize annual expenses by month
- Designed compelling gradient animation border for expense form using **keyframes** in **CSS**
- Implemented expense chart, displaying monthly expenses with **dynamic inline styling** and **React useState**

SIMON | HTML, CSS, Javascript, jQuery

May 2022 – June 2022

- Developed 'Simon' inspired memory game with **HTML**, **CSS**, **Javascript**, and **jQuery**
- Integrated **CSS animations** and sound effects with button clicks with **jQuery**

EXTRACURRICULARS AND LEADERSHIP

Executive Committee Member | Skyky Charity Concert

May 2021 – August 2021

- Executive Committee Member for **2021 Skyky Charity Concert for SickKids Foundation**
- Raised **\$13000** for SickKids Foundation and received letter of commendation from **Justin Trudeau**

Competitive Swimmer

March 2015 – January 2022

- Qualifier for the Ontario Swimming Championship, Ontario Youth Junior Championship, Eastern Nationals, medalist at Provincial AA Swimming Championship and Age Group Internationals

Pianist

July 2007 – Present

- ARCT Performers (RCM) level pianist, Ontario Music Festivals Association Provincial Finalist

EDUCATION

University of Waterloo

Waterloo, ON

Candidate for Bachelor of Computer Science (GPA: 3.92)

Expected Graduation Date: April 2027