# 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

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

Academic Tutor October 2019 – July 2022

Self-Employed

- Launched tutoring startup to help students ages 5-16 in academic subjects of Math, English, Science and Music
- Promoted service on multiple social media platforms, such as Wechat and Kijiji, acquiring over 15 students
- Fostered average increase of 14% in students' academic performance in instructed subjects

## 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

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