Daniel Xu

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SKILLS

Languages: C/C++, Java, Python, R, HTML/CSS, Javascript
Frameworks: React, Next.js, Bootstrap, Tailwind, Firebase
Developer Tools: Git, VS Code, Visual Studio, PyCharm, IntelliJ, Eclipse, Google Cloud Platform, Github, Data Structures and Algorithms, Object Oriented Programming
Libraries: pandas, Matplotlib

EXPERIENCE

Web Developer   Nov. 2022 – Present
Discourse Agency
- Created an interactive **Privilege Walk API** using **Next.js** and **Tailwind**, as a branch of the Discourse Agency Website
- Implemented **Firebase** to store previous user responses in a **Realtime Database**, and retrieve data to simulate a privilege walk with **10 other users**
- Developed an algorithm to recommend **9 different** company services such as Inclusionary Education and Crisis Response based on questionnaire responses

Academic Tutor   Oct. 2019 – July 2022
Self-Employed
- Launched a 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, Kijiji, Nextdoor, and acquired **over 15 students**
- Fostered an average **increase of 14%** in students' academic performance in instructed subjects

PROJECTS

CodeMan | *Java*   July 2022 – Present
- Designed and programmed a 'Pokémon' inspired 2D game using **Java**, based with **JPanel**, **JFrame**, and **Graphics2D** classes
- Implemented self-created pixel art, comprising of character sprites, game tiles, and a **70x60 tile** world map
- Incorporated an FPS tracker, and **optimized** frame-to-frame render time to **0.05s** with **delta game loop**

Expense Tracker | *React, HTML/CSS, Javascript*   Sept. 2022 – Oct. 2022
- Built an expense tracker web application using **React**, which helps users visualize their annual expenses, relative to each month
- Designed compelling gradient animation border for expense form using **keyframes** in **CSS**
- Constructed a dynamic expense chart, which demonstrates relative monthly expenses by combining **inline styling** and **React useState**

EXTRACURRICULARS AND LEADERSHIP

Executive Committee Member | *Skyky Charity Concert*   May 2021 – Aug. 2021
- Executive Committee Member for the **2021 Skyky Charity Concert for SickKids Foundation**
- Raised **$13000** for SickKids Foundation and received letters of commendation from Prime Minister **Justin Trudeau**, Premier **Doug Ford**, and Mayor **John Tory**

Competitive Swimmer   Mar. 2015 – Jan. 2022
- Provincial level swimmer, qualifier for the Ontario Swimming Championship, Age Group Internationals, and medalist at Provincial AA Swimming Championship

Pianist   July 2007 – Present
- ARCT (Royal Conservatory of Music) level pianist, and Ontario Music Festivals Association Provincial Finalist

EDUCATION

University of Waterloo   Waterloo, ON
Bachelor of Computer Science   *Sept. 2022 - Apr. 2025*