JASON ZHANG

j2343zha@uwaterloo.ca
https://jas6zhang.github.io/
www.linkedin.com/in/j6z
https://github.com/jas6zhang

SKILLS

Languages: Python, JavaScript, Java, SQL, C++, VBA, HTML/CSS

Technologies: Git, React, Node.js, MongoDB, Firebase, SQLite, Pandas, Matplotlib, TensorFlow

Applications: Figma, Postman, Google Cloud Platform, Excel, Tableau, Power BI, Premiere, Photoshop

EXPERIENCE

Data Analyst @ Graduate Studies & Postdoctoral Affairs

(Co-op) Apr 2021 - Aug 2021

- Generated **Power BI** dashboard reports communicating insights and analytics needed to guide critical admission decisions.
- Optimized **SQL** queries and developed a comprehensive understanding of data warehousing methodologies and schemas.
- Wrote Python scripts using **pandas** to automate various data cleaning and ETL procedures in Excel.
- Led survey distribution and analysis project gathered from a sample size of more than **5000** accepted applicants.

Software Developer Intern @ Phyxable

(Part-time) July 2021 - Present

- Created physiotherapy solutions application using **React.js, MongoDB, Express** and **Node.js** and implemented various APIs.
- Coordinated with Product Manager and designers in **Agile sprints** to develop maintainable software according to the needs of various clients.

Director of Public Relations @ Industry 4.0 Design Team

Sep 2020 - Present

- Designing a data-driven case competition promoting the concepts of optimization, data analytics, and operations research to **160+ competitors** across Canada.
- Planned publicity strategies and presented sponsorship pitches to finance team expenses, securing over **$2000** in funds.

PROJECTS

Detective Duck (Winner of Hack the 6ix - Accenture: Most Innovative Use of Tech)

- Created a real-time phishing detection application that prevents targeted children from clicking malicious links on the web.
- Pre-processed dataset and deployed the regression-based machine learning model on **Google Cloud**.
- Worked with web scraping tools such as **Selenium** to extract link information and served API requests to the Cloud functions.
- Designed a responsive, user-friendly GUI based on mouse and keyboard detection using various **Python** libraries.

Campfire

- Collaborated with a team of 3 to develop a social media application where users connect with each other through daily journaling.
- Designed the UI/UX for application webpages and implemented the design with **React.JS** and **Tailwind CSS** frameworks.
- Created API endpoints with **Python Flask** and stored user information in a **SQLite** database.
- Established a secure login system by utilizing **JWT** to authenticate users and **bcrypt** to hash passwords.

Decision Support Tool

- Developed an **Excel VBA** task management and adaptive scheduling system to automate task delegations in a meeting.
- Directed a team of 4 as the technical lead and applied **Agile methodology**, working in iterative cycles to meet target milestones.
- Conducted user research, gathered client requirements, and assessed existing workflows to design prioritization algorithms.

Math Garden

- Engineered a neural network using **TensorFlow** to classify handwritten number digits for an interactive math game.
- Defined operations for performance metrics and pre-processed datasets to train model. Achieved **80%** classification accuracy.
- Integrated the model as a JSON file onto a web interface, and dynamically rendered game components using **JavaScript.**

EDUCATION

University of Waterloo

Sep 2020 - Apr 2025

- BASc Candidate for Honours Systems Design Engineering
- GPA: 94.1% - Dean's Honours List
- Mon Sheong Golden Jubilee Scholar