

# JACK BAI

DEV

Python | R | R Markdown  
LaTeX | Django | Bash  
Git | SQL | Spring | React



/jack-bai-waterloo



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## EXPERIENCE

### OPEN TEXT CORPORATION

Software Engineer | Sep 2022 - Dec 2022

- Researched and developed a Spring, React, and PostgreSQL based application as a proof of concept for an internal service
- Collaborated with senior developers to refactor API's improving 1000+ clients experience with the Case Management Application
- Implemented keyboard navigation in React to enhance user experience and meet modern accessibility requirements and improving product usability

### RIDECO TRANSIT LABS INC

Full Stack Developer | May 2022 - Sep 2022

- Designed and implemented 100+ assets in Django in accordance to 1000+ clients needs contributing to customer satisfaction and deployment of mobile applications on App Store
- Engaged in regular discussion on possible solutions with the product manager and engineering team to reach conclusive and optimal results

### DEMATIC VIRTUAL SYSTEMS

DVF Software Engineer | Sep 2021 - Dec 2021

- Lead performance analysis within 99% confidence leveraging multiple AWS EC2 instances to optimize production costs and time for future development
- Refactored testing framework to include Data Driven principles for efficient adaptability and cleaner code management
- Designed UML diagrams to illustrate complex systems and communications between services to revise and improve outdated code to ensure code clarity and maintainability for future development

### UNIVERSITY OF WATERLOO

CS 116 Instructional Support Assistant | May 2020 - Aug 2020

- Helped students conceptually understand high-level data structures through 110+ hours of individualized instruction and collaborative learning
- Diversified Python knowledge by leading students to reach a multitude of different solutions, enhancing and reinforcing multiple pathways to success

## PROJECTS

### WINRATE ANALYSIS OF TEAM-BASED ONLINE GAMING

Python | Numpy | Pandas | R Markdown

- Systematically collected and pre-processed over 30,000 online match data from League of Legends through API requests
- Conducted statistical testing of win rates for online identities in various settings and delivered an informative and visually stunning analysis with breakthroughs supported through data and metrics

### JACKBAI.CA

HTML | CSS | JavaScript | React.JS | Git

- Ongoing and frequently updated website about personal hobbies, interest, and projects to highlight milestones and refine front end development skills
- Initiated to apply learnings from a Udemy course on React

### PENGUIN TROUBLE

Unity | C # | Git

- Created a 2D game using Unity with C# scripts to explore the domain of game development
- Used OOP principles for maintainable and modular code for future development and revision

## EDUCATION

### BACHELOR OF MATHEMATICS HONOURS STATISTICS AT UNIVERSITY OF WATERLOO

University of Waterloo | 2018 - 2023