

Jialuo (Eric) Chen

☎ 365-996-2310 ✉ jialuo.chen@mail.utoronto.ca  [linkedin](#)  [github](#)  [website](#)

Education

University of Toronto

September 2022 – May 2027

Bachelor of Applied Science and Industrial Engineering with PEY-COOP

Toronto, ON

- **Minor:** Computer Science, Artificial Intelligence in Engineering, Engineering Business
- **Relevant Courses:** Data Structure and Algorithm, Database Systems, Object Oriented Programming, Software Design and Architecture, Version Control Systems, Design Pattern, Machine Learning, Deep Learning

Skills

Programming: Python, Java, JavaScript, TypeScript, C, HTML/CSS, SQL, R, Matlab, Shell Scripting

Technologies: Git, Linux, Spring Boot, React.js, node.js, PostgreSQL, NoSQL, RESTful API, Figma, JQuery, JUnit, Jest

Concepts: Clean Architecture, SOLID Principles, UML, Test-Driven Development, Responsive Design

Additional Skills: Communication, Teamwork, Problem-Solving, Collaboration, Leadership, Microsoft 365

Experience

Centivizer

May 2024 – August 2024

Front End Developer

Toronto, ON

- Refined user login functionality for a research game using **React.js** and **JavaScript** to capture essential demographic data from **100+** participants, which streamlined the backend data classification process.
- Packaged user input and IP addresses into JSON objects, enabling accurate backend storage via **REST** HTTP requests.
- Enhanced game interface usability by implementing a dynamic navigation header and displaying user-specific details, resulting in a **15%** increase in user rating.

Hangzhou Cellinemory Brand Management Co., LTD

May 2023 – July 2023

Technology and Operation Intern

Hangzhou, China

- Revamped the company's Shopify site with new visual design and custom domain, improving its readiness for global e-commerce expansion.
- Optimized **Stable Diffusion** hyperparameters to train on **100+** images of Korean model datasets, achieving an **8%** improvement in image quality for product visualization and minimizing reliance on professional model photoshoots.

Projects

WeedOut Open Source Library [link](#) | *React.js, Flask, RESTful APIs, Git*

July 2024 - Present

- Contributed to **WeedOut**, an **open-source** Python library for data preprocessing, by leading the development of its documentation platform to enhance collaboration and accessibility for the open-source community.
- Designed and developed the documentation webpage layout and UI using **Figma**, and implemented it with **React.js**, **JavaScript**, and **React Bootstrap**, providing responsive access to function details, user guide, and installation.
- Implemented backend logic using **Python Flask** and **RESTful APIs**, supporting real-time documentation updates.

Personal WealthTracker [link](#) | *Java, Clean Architecture, OOP, React, Git*

July 2024 - Present

- Co-led and designed a Personal WealthTracker System using **UML**, **Clean Architecture**, and **SOLID Principles** to ensure scalability and maintainability, enabling seamless team collaboration and robust feature integration.
- Implemented a responsive **front end** UI using **React.js**, **JavaScript**, and **HTTP requests**, enhancing user experience by optimizing performance and ensuring seamless interaction with the system's backend.
- Implemented a robust backend system using **Spring Boot** and **RESTful APIs** to ensure stable integration with the front end, enabling features such as user transaction management and joint account functionality.
- Achieved **93%** test coverage in business and application layers using **JUnit** unit testing to enhance system stability.

Portfolio Website [link](#) | *React, Chakra UI, CI/CD, Git*

January 2025

- Developed a personal portfolio website using **React.js**, **JavaScript**, and **Chakra UI** to highlight my skills, personality, and experiences, featuring user-friendly design eamlessly adapts to various screen sizes.
- Automated website deployment on GitHub.io using a **CI/CD** pipeline with **deploy.yml**, enabling automatic updates, error checking on each push, and eliminating manual deployment efforts.

Course Management System | *Java, SQL, Hibernate, JPA, Docker, Git*

October 2024 - November 2024

- Implemented complex **SQL** queries on a **Microsoft Access Database** to analyze course statistics, including average scores and student information, and exported results to CSV files to provide actionable insights for future planning.
- Leveraged **Docker** to containerize the database environment and applied **JPA** and **Hibernate** to establish seamless connectivity between the Java application and database, enabling efficient execution of SQL operations.

Traveling Salesman [link](#) | *Java, OOP, Network, Optimization, Algorithm*

October 2023 - December 2023

- Implemented improved **greedy algorithms** (Nearest Neighbor, Nearest Neighbor First-Last, Node Insertion) to optimize traveling paths among 1000+ nodes, achieving a 20+% reduction in computation time compared to example.