Katie Liu

✉ katieliu505@gmail.com   📞 416-856-6160   🔗 katieliu.dev   🐙 github.com/whoiskatie

EDUCATION

University of Ottawa
BSc in Computer Science (GPA: 3.57/4.0)   *Sep. 2021 - Apr. 2026*
Coursework: Design and Analysis of Algorithms I, Databases I, Data Communications & Networking
- Dean's Honour List (2022)

WORK EXPERIENCE

Full-Stack Software Developer @ CI-Technologies   *May 2024 - Aug. 2024*
- Developing and maintaining web applications in Java (Spring, Hibernate), JavaScript (Vue) and SQL.

Full-Stack Software Developer @ Cliniconex   *Jan. 2024 - Apr. 2024*
- Collaborated with cross-functional team to identify and resolve production bugs, address customer requirements, and implement enhancements in web-based application in Java (Guice, GWT, Objectify).
- Enhanced performance of RESTful APIs and Google Datastore queries by reducing request overhead and implementing indexes. Boosted check for similar sent messages feature response time from upwards of 12 seconds to just 2 seconds, achieving an efficiency increase of up to 83.8% for thousands of users.
- Designed comprehensive unit and integration tests, leveraging Mockito, to emulate end-to-end scenarios, ensuring feature functionality and facilitating future regression tests.

Junior IT Analyst/Developer @ Canada Revenue Agency (CRA)   *May 2023 - Aug. 2023*
- Designed and implemented SAP ABAP functions that optimized the administrative ERP system's financial accounting and management functionality for 200+ employees across CRA and CBSA.
- Increased reliability of module changes by conducting unit tests within development and QA environments.

PROJECTS

PhishBlock │ *Python, Flask, Next.js, JavaScript, HTML/CSS, Gmail API*   github
- Collaborated in a team of 4 to develop a Flask web application leveraging LLMs to parse and analyze email messages and recorded calls, winning CSE's Machine Learning Challenge at uOttaHack 6.

e-Hotels │ *JavaScript, HTML/CSS, PostgreSQL, React.js, Node.js, Express.js*   github
- Developed a full-stack hotel management web application, connecting React front-end and PostgreSQL back-end via RESTful API.
- Optimized database SQL queries for available hotel room browsing with views and indexing.
- Maintained constraints and integrity between data using triggers and multi-statement transactions.

Mealer │ *Java, Android SDK, Firebase, Git*   github
- Led 4 teammates to build a mobile food pick-up application in Java using Android SDK, supporting 3 user types with distinct privileges.
- Integrated Firebase as MBaaS for authentication and to create, store, and query user data in browsing and purchasing use cases.
- Facilitated regular meetings during sprints for task estimation, bottleneck mitigation, and meeting of deliverable objectives.
- Adopted MVC architecture to reduce coupling between logic and user-facing components.

SKILLS

Languages: Java, C++, Python, PostgreSQL, JavaScript, HTML/CSS

Frameworks: Node.js, Express.js, JUnit, Mockito,

Tools: Git, Google Cloud GCP, Google App Engine, GWT, VS Code, IntelliJ, Eclipse