Richard Liao

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SKILLS

Product Management: Agile Scrum, Product Roadmapping, A/B Testing, Data-Driven Decision Making, User Story Writing, Backlog Prioritization
Technical: Python, SQL, React, Java, C#, Selenium, Documentation, Data Visualization, Feature Analysis
Tools: Jira, Confluence, Git, Databricks, Postman, Figma, MS Office, PowerPoint, Excel

EXPERIENCE

Wilfrid Laurier University January 2025 - April 2025
Machine Learning Researcher Waterloo, ON
- Processing geospatial and socioeconomic data to evaluate site suitability for new EV charging stations using **Python, Pandas, NumPy** and **feature-based learning** under Professor Sukhjit Singh Sehra
- Designed and implemented a cost optimization model to identify ideal locations that minimize infrastructure costs while maximizing accessibility and grid efficiency

Cita Marketplace September 2024 - December 2024
Product Manager Intern Toronto, ON
- Led end-to-end feature prioritization and backlog management, accelerating product delivery cycles by **20%**
- Leveraged in-depth user behavior analysis and data-driven insights to streamline checkout flows, increasing successful conversions by **15%** and reducing customer support inquiries by **10%**
- Wrote detailed user stories and acceptance criteria while leading sprint planning and backlog grooming sessions, accelerating delivery timelines ensuring alignment with product vision

Dayforce January 2024 - August 2024
Software Engineer Intern Toronto, ON
- Diagnosed and resolved critical backend bugs, minimizing downtime for **5000+** companies and enhancing performance for **3.5 million+** daily users
- Developed **10+** test automation scripts by migrating from the legacy FitNesse framework to **SpecFlow** using **C#** and **Selenium** increasing test coverage by **15%**
- Validated **REST APIs** for backend services using **Postman**, debugging and fixed data inconsistencies that led to a **25% reduction** in failed requests and improved overall reliability
- Directed **QA** processes across manual and automated testing using **React, C#.Net, and SQL**, achieving a **90%** reduction in user-reported issues

CIBC Capital Markets September 2023 - December 2023
Business Analyst Intern Toronto, ON
- Developed an **NLP AI chatbot** using **Python, SpaCy** and **SQL** to interpret financial prompts and execute correlated **SQL** queries for fixed income bonds improving data retrieval efficiency
- Automated trade report generation from **Oracle** database to **Excel**, reducing manual processing time by **4+** hours weekly
- Utilized **Confluence** to document the NLP AI Chatbot's architecture, entity extraction flow and SQL query generation logic, enabling seamless knowledge transfer across engineering and product teams
- Led user research within a cross-functional team of **5** to refine product strategy, develop a data-driven roadmap, and optimized an machine learning model that accurately extracted currencies and time frames for **SQL** querying

Civiconnect January 2023 - April 2023
Software Engineer Intern Beamsville, ON
- Led a team of developers and designers to design, build, and deploy two responsive websites using **JavaScript, React, and Figma**, improving user engagement by **50%**
- Integrated **Strapi** with a **Node.js** backend as a content management system and deployed on **AWS** ensuring stakeholders to be able to easily update content

EDUCATION

Wilfrid Laurier University September 2020 – April 2025
Bachelor of Science in Computer Science Waterloo, ON
- Relevant Coursework: Software Engineering, Databases, Big Data, Artificial Intelligence, Machine Learning, Computer Networks, Data Structures
- Awards: Entrance Scholarship, Dean's List