

Jack Lacy

MESc Software Engineering Candidate



Jack-Lacy



jack-lacy



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EXPERIENCE

WESTERN UNIVERSITY | GRADUATE TEACHING ASSISTANT - DATABASE MANAGEMENT SYSTEMS

September 2025 – Present | London, Ontario

- Lead weekly lab sessions for 100+ students, focused on Q&A and assignment support, clarifying database design, SQL, and normalization concepts.
- Provide one-on-one and group assistance throughout the semester-long database project, helping students apply relational modeling and implementation principles.
- Proctor midterms and final exams, ensuring academic integrity and smooth execution of course assessments.

CARFAX | SOFTWARE DEVELOPMENT INTERN - DATA & AI/ML

May 2023 – August 2024 | London, Ontario

- Contributed full-stack improvements to three applications, including system enhancements for a cloud-based document scraping engine (Java, AWS), and developing web-based tools for document scraping template management (TypeScript, React).
- Worked closely with senior engineers in an Agile environment, leveraging practices like pair programming, test-driven development (TDD), and infrastructure as code (IaC).
- Expanded technical expertise and experience in cloud/back-end development, cloud infrastructure (Terraform), automation, and software architecture, building a foundation for future specialization.

PROJECTS

3-DIMENSIONAL TOBOGGAN DISPLAY | REACT, TYPESCRIPT, THREE.JS, AWS

Western Engineering Toboggan Team - 2025

- Lead the design of an application to display interactive models of the toboggan and its components and had it hosted on AWS.
- Developed a creative and user-friendly website, presented at the technical exhibition of the Great Northern Concrete Toboggan Race to highlight the toboggan's design process and craftsmanship.

BUILDING NAVIGATION APP (B-NAV) | REACT, TYPESCRIPT, FASTAPI, LEAFLET, AWS

Capstone Project - 2025

- Took on a team-lead role in a team of 4 software engineers to win 3rd place out of 30+ teams in our full-year capstone course.
- Enables new students or guests to navigate to their classes inside buildings as they would navigate outdoors with Google Maps.
- Users are able to route from room to room, between floors and buildings, and will have a web-based GUI built using React and Leaflet.js.

HEART DISEASE RISK ANALYSIS | PYTHON, SCIKIT-LEARN

Machine Learning Class - 2024

- Worked with a group of 5 people to create a neural network and a random forest classifier to accurately predict the risk of heart disease.
- As a result, the models we developed both had accuracies around 90% with the random forest classifier being more precise.

SKILLS

PROGRAMMING

Proficient:

Java • JavaScript • TypeScript
Groovy • JUnit • Spock
C# • SQL • CSS • HTML
Terraform • AWS CDK
Python

Experienced:

EJS • C++ • Matlab
C • ARM Assembly

LIBRARIES/Frameworks

Express.js • React • REST
Spring • Three.js • PDFBox

TOOLS/PLATFORMS

Gitlab • Jenkins • Kubernetes
GCP • AWS • Docker • Gradle
Unity • MySQL • Node.js

EDUCATION

WESTERN UNIVERSITY

BACHELOR'S IN SOFTWARE
ENGINEERING (BESc)

Sept 2020 - April 2025 | London, Ontario

WESTERN UNIVERSITY

MASTER'S IN SOFTWARE
ENGINEERING (MESc)

Research in generative-AI for
software development.

Sept 2025 - August 2027 | London,
Ontario

ACCOLADES

- AWS Certified Cloud Practitioner (2024 - 2027)
- Dean's Honors List (2025)
- Dean's Honors List (2023)