# Jack Lacy

## Software Engineering Graduate









## **EXPERIENCE**

**CARFAX** | Software Development Intern - Data & AI/ML May 2023 - August 2024 | London, Ontario

- → Contributed to various projects, including system enhancements for a document scraping engine (Java, AWS services), developing web-based tools for document scraping template management (TypeScript, React), and implementing automated deployment pipelines for both projects (GitLab CI/CD).
- → Worked closely with senior engineers in an Agile environment, leveraging practices like pair programming, test-driven development (TDD), and infrastructure as code
- → Expanded technical expertise and experience in cloud/back-end development, cloud infrastructure (Terraform), automation, and software architecture, building a foundation for future specialization.

METRO INC. | TECHNICAL SUPPORT INTERN

May 2022 - September 2022 | Toronto, Ontario

- → Assisted the technical support team in resolving tickets both on-site and at Metro's warehouses, ensuring timely and effective issue resolution.
- → Imaged and deployed laptops with Microsoft SCCM, installing required software for end-users.
- → Installed and upgraded hardware, including replacing hard drives in laptops.

## **PROJECTS**

#### 3-DIMENSIONAL TOBOGGAN DISPLAY | REACT, TYPESCRIPT, AWS

Western Engineering Toboggan Team - 2025

- → As the software team lead, I created a TypeScript-based React application to display interactive models of the toboggan and its components and had it hosted on AWS.
- → Developed a creative and user-friendly website, leveraging modern web technologies like ThreeJS for 3D modeling, 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, MONGODB, AWS Capstone Project - 2025

- → Goal of enabling new students to navigate to their classes inside buildings as they would navigate outdoors with Google Maps.
- → Users will be able to route from room to room, between floors and buildings, and will have a web-based GUI built using React and Leafletjs.
- → Currently advancing this project in a scrum-based Agile work environment.

## **HEART DISEASE RISK ANALYSIS** | PYTHON, SCIKIT-LEARN

Machine Learning Class - 2024

- → Goal of creating a machine learning model able to accurately predict the risk of heart disease based on health and lifestyle factors.
- → As a group we developed two models, one being a neural network and the other being a random forest classifier.
- → 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

#### Experienced:

Python • EJS • C++ 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

#### ACCOLADES

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

## **COURSEWORK**

- → Database Management Systems
- → Cloud Computing
- → Information Security
- → Software Requirements & **Analysis**
- → Operating Systems
- → Software Testing and Maintenance
- → Artificial Intelligence & Machine Learning