

# Waleed Sherwani

wmksherwani@mun.ca ♦ +1 (709) 327-5285 ♦ St. John's, NL, CA | [GitHub](#) | [LinkedIn](#) | Feb 4, 2004 | Int. Student (Study Permit)

## EDUCATION

### Memorial University of Newfoundland (MUN)

Bachelor of Engineering

2022 – Present

St. John's, NL, Canada

- Computer Engineering | Academic Term 7 (4<sup>th</sup> Year) | Class of 2026 | GPA: 3.78
  - Faculty of Engineering and Applied Sciences: Dean's list (2022 – 2023)

## WORK EXPERIENCE

### AI & Automation Developer Intern

Nasdaq

Sep. 2025 – Present

St. John's, NL, Canada

- Designed the end-to-end architecture for an AI “Mixture-of-Experts” service that consumes code changes and surrounding organizational context, orchestrating multiple specialized LLM agents (e.g., performance, risk, testing, code quality) to generate feedback directly within GitHub workflows.
- Developed cloud-native data and analytics pipelines that aggregate engineering and knowledge-base telemetry from internal Q&A, code hosting, documentation, and CRM platforms into a centralized Data Lake on AWS, enabling SPACE and DORA-style productivity dashboards in Grafana.
- Implemented serverless collectors and ETL workflows using AWS services (e.g., Lambda, API Gateway, Glue, S3, Athena) to reliably ingest, transform, and surface engineering metrics for self-serve analytics and reporting.
- Built a retrieval and context-routing layer that blends structured metrics, knowledge-base content, and vectorized embeddings to ground agent reasoning and improve the relevance of AI-generated recommendations.

### Datalake Developer Intern

Nasdaq

May. 2024 – Aug. 2024 & Jan. 2025 – Aug. 2025

St. John's, NL, Canada

- Contributed to the development of a new data lake pipeline, utilizing Java, Scala, Spark, and Serverless Computing on AWS, with a strong focus on data storage and pre-processing.
- Implemented database splitting logic in Scala code and maintained setups for new data types, ensuring data quality through comprehensive data validations using Spark and Jupyter Notebooks.
- Collaborated with a team of data analysts to develop and implement data analytics solutions.
- Made significant contributions to the ongoing development of the Step Function in the Data Pipeline, integrating it with other AWS services to enhance pipeline efficiency.

### Data Analytics and Project Control Intern

SNC-Lavalin - Dragados - Pennecon General Partnership (SDP-GP)

Sep. 2023 – Dec. 2023

Argentia, NL, Canada

- Programmed specialized data analytics workflows in Python and C++, using libraries Pandas, NumPy, and Matplotlib for data manipulation, validation, and visualization, enhancing data processing and analysis.
- Implemented web parsing techniques for efficient database data collection using Selenium & Requests-HTML
- Automated File-Sorting and Document Generation using Image Recognition with Tesseract and TensorFlow, based on a keyword model developed on a trained set of documents.
- Created file parsers, notably a Primavera P6 Critical Path Visualization using Python, JavaScript and Flask framework, along with a PowerBI Data Parser utilizing Python and JSON.

### Robotics Research Intern

Memorial University of Newfoundland

Jan. 2023 – May. 2023

St. John's, NL, Canada

- Integrated DekaBot & Adafruit Color Sensors into ZumoBots and developed custom C++ software to operate them.
- Developed ZumoBots' implementation in Swarm Robotics by comparing evaluated improvements from the DekaBot.
- Programmed contextual Line Detection Software and Alignment Algorithms with PID Control loop mechanisms.
- Implemented I<sup>2</sup>C protocol for communication between ZumoBots' microcontroller and various sensors and modules, improving the functionality and efficiency of the robots.
- Tested and debugged sensors and actuators in design implementations.

## ADDITIONAL EXPERIENCE

<b>Valiant Aerotech – Software Team Lead</b> <i>Student Design Hub – Memorial University of Newfoundland</i>	<b>Sep. 2024 – Present</b> <i>St. John's, NL, Canada</i>
▪ Lead a software team of 5 engineers in the design, development, and deployment of autonomous flight control systems for UAV platforms.	
▪ Represented Valiant Aerotech at the 16 <sup>th</sup> AEAC Annual Competition in Alberta, showcasing autonomous flight prototyping and sensor-fusion techniques for firefighting applications.	
<b>ISWEP Scientific Computing – Research Assistant</b> <i>Department of Chemistry – Memorial University of Newfoundland</i>	<b>Sep. 2024 – Feb 2025</b> <i>St. John's, NL, Canada</i>
▪ Designed specialized implementation for $\pi$ bonded molecular generation on the CReM framework.	
▪ Developed Jupyter Notebooks with data analytics implementation for researchers.	
<b>Data Quality Specialist</b> <i>Medical Document Team – SiftMed</i>	<b>May. 2024 – Aug. 2024</b> <i>St. John's, NL, Canada</i>
▪ Performed comprehensive QA for system output, ensuring accurate document tags, groupings, and metadata before final client delivery.	
▪ Automated document processing tasks, streamlining workflows with keyboard commands and resolving duplicate documents efficiently, using python	
<b>Data Quality Assurance Analyst</b> <i>Data and Image Analysis Group - Memorial University of Newfoundland</i>	<b>May. 2023 – Sep. 2023</b> <i>St. John's, NL, Canada</i>
▪ Analyzed medical images, ensuring data accuracy, and collaborating with researchers from both the DIAG and FAISAL Labs to improve patient care through automated image-derived metrics.	

<b>ISWEP Research Assistant</b> <i>Graduate Office – Memorial University of Newfoundland</i>	<b>Jun. 2022 – Sep. 2022</b> <i>St. John's, NL, Canada</i>
▪ Programmed a Python script that parses data from an Excel workbook and performs a selective Internet Search.	
▪ Designed a survey analysis format using Excel, with automatic, predefined data visualizations such as linear models, predicted changes, and bell curves.	

## PROJECTS

- **TripTailor – Go | JavaScript | Docker | PostgreSQL**
  - Developing a microservices-based itinerary sharing platform using Go and JavaScript.
  - Containerized the backend and database services using Docker
  - Designing RESTful APIs in Go for seamless communication between the frontend and backend.
- **Spenditure – Java | JavaFX | Tesseract | Gradle | PostgreSQL**
  - Written in Java on the JavaFX GUI platform for a desktop application
  - Wrote Image Recognition software using Tesseract to parse receipts
  - Created user data analytics using JGraphX and JavaFX
  - Warehoused user data using PostgreSQL
- More on [Github](#) :)

## SKILLS

▪ C++	Python	Java	C#	JavaScript	Django	Flask	MongoDB	SQL
▪ NumPy	Pandas	Matplotlib		TensorFlow	PyTorch	Tesseract	Selenium	BS4
▪ KiCAD	PSpice	MATLAB		AutoCAD	Blender	MS Office	Assembly	R

## CERTIFICATIONS

▪ <a href="#">Google Advanced Data Analytics</a>	<b>Sep. 2023</b>
▪ <a href="#">Google Data Analytics</a>	<b>Jan. 2023</b>
▪ <a href="#">Onshape Fundamentals: CAD Learning Pathway Completion</a>	<b>Jan. 2023</b>
▪ <a href="#">Tech Stewardship Practice Program (TSPP)</a>	<b>Dec. 2022</b>
▪ <a href="#">Workplace Hazardous Materials Information System (WHMIS)</a>	<b>Aug. 2022</b>