

Julia Groza

jgroza24@gmail.com | juliagroza.com | github.com/julia24g | linkedin.com/in/juliagroza

WORK EXPERIENCE

PointClickCare

Software Engineer II, AI-Assisted Skilled Nursing Facility Admissions

Aug 2025 – Present

- Built an automated insurance payer selection workflow using AI-extracted data and Java async concurrency to parallelize payer verification, replacing manual payer lookups; reduces verification time from 5 min to 20 sec
- Architected a configuration-driven, extensible X12 EDI parsing module with a declarative rule engine to replace an inflexible third-party solution; supports 3M+ insurance eligibility checks per month across multiple products
- Designed multi-tenant integration test framework using Testcontainers with per-test tenant isolation and container reuse for parallel testing; eliminated manual data cleanup and reduced local test runtime by 85% across 12+ tests
- Co-presented flagship product to 600+ engineers and executives following initial release, communicating system design and customer efficiency gains; reinforced executive buy-in and attracted cross-team collaboration

Software Engineer I, Patient Analytics

May 2024 – Aug 2025

- Drove **SQL Server** index optimization across 12M+ rows by analyzing execution plans and DMVs, replacing costly clustered scans with seeks to protect batch processing capacity under growth; cut logical reads 40% and CPU 20%
- Resolved critical defect in **Azure Data Factory** analytics pipeline by identifying 2.5M duplicate records, fixing stored procedures, and developing rollback-safe deduplication scripts; reduced largest customer's inaccuracies by 60%
- Spearheaded a summer engineering mentorship program for 20 high school students building a Spring-based analytics API; several participants advanced to co-op roles, resulting in program renewal

PointClickCare, Software Engineer Intern

May 2023 – Aug 2023

- Redesigned allergy code retrieval in a clinical **Java Spring** application by extending REST, DAO, and DTO layers to support mapping across multiple clinical terminology libraries, reducing third-party API reliance

Faculty of Engineering at Western University, Research Assistant

Nov 2022 – April 2024

- Built a decentralized peer-to-peer solar energy trading platform on **Ethereum** and optimized **Solidity** smart contract architecture using **Factory/Singleton** patterns; reduces gas cost by 35% versus [prior research systems](#)
- Co-authored 3 peer-reviewed academic publications on solar energy systems and decentralized energy infrastructure, contributing modeling and analysis; work published in Renewable and Sustainable Energy Reviews

Deloitte, Data Science Analyst Intern

May 2022 – Aug 2022

- Retrieved client data from **Azure SQL Database** by writing stored procedures on **Azure Synapse** for a Crown corporation to cut reimbursement time by 85%

PROJECTS & AWARDS

[RoBotany](#), *Hack the North Finalist (1000+ participants)*

Sep 2023

- Built an NLP pipeline using **BentoML** intent classification and **Cohere** entity extraction to translate natural language queries into structured **CockroachDB** actions over live IoT plant sensor data

[Remove Radon](#), *Borealis AI Let's Solve It Mentorship Program*

Feb 2023 – May 2023

- Developed a radon prediction model (**NumPy**, **scikit-learn**) by evaluating regression models across 4 datasets and deploying via **Docker**, **Amazon ECR**, and **AWS Lambda** to automate detection of hazardous radon levels in homes

Project Awards: Finalist at Hack the North (2023); Ivey New Venture Award (2023); Best Distributed Ledger Hack at R.U. Hackathon (2021); Top Three Hack at SheHacks (2021); Best Machine Learning Hack at Hack Western (2020)

TECHNICAL SKILLS

Languages: Proficient in Java, Python, SQL, JavaScript, TypeScript

Frameworks & Tools: Spring Boot, Spring Security, Hibernate, REST APIs, GraphQL, JUnit, React, Microsoft SQL Server, Neo4j, Docker, Kubernetes, Terraform, Azure, GitHub Actions, Claude Code

EDUCATION

Western University, Ivey Business School

Sep 2019 – May 2024

Bachelor of Science, Honours Computer Science & Bachelor of Arts, Honours Business Administration: 4.0 GPA