

ALEKSEJ ZABIJAKIN

☎ 647-975-7802 ✉ azabijakin1@gmail.com [LinkedIn](#) [My Website](#)

SKILLS

Languages: Java, Python, Typescript, Next.js, Javascript

Technologies/Frameworks: Spring Boot, Docker, Oracle SQL, MongoDB, Kafka, Kubernetes, Gradle, Jenkins, Git, Junit

EXPERIENCE

Citigroup

Jul. 2023 – Present

Software Engineer – Fixed Income eTrading

- Architected and implemented a mission-critical golden source reference data system using Java Spring Boot and MongoDB, processing real-time Fixed Income trading data **serving 15+ downstream systems with 99.99% availability**
- Engineered and deployed an end-to-end test automation framework leveraging Cucumber/Gherkin BDD methodology, **achieving 65% increased test coverage** through seamless CI/CD pipeline integration
- Modernized legacy Support UI from Angular 5 to 16, implementing modern state management and component architecture, resulting in **50% faster development velocity**
- Resolved critical trading data discrepancies by collaborating with support, **utilizing debugging and log analysis to identify root causes** and implement lasting solutions

Citigroup

May 2022 – Aug. 2022

Software Engineer Intern – Global Spread Product Syndication

- Implemented a new CI/CD pipeline, achieving a **40% reduction in build times**, leading to faster development cycles and deployments
- Created an Oracle SQL database for application property injection at startup, **streamlining deployments and saving over 1 hour per change**
- Demonstrated experience with agile methodologies, **effectively adapting to changing requirements** within a fast-paced development environment

Ted Rogers School of Management - Cybersecurity Research Lab

Sept. 2021 – Apr. 2022

Research Assistant - Mosaïque

- Utilized **blockchain technology to develop a decentralized governance workflow platform** to enable trust, transparency and accountability
- Leveraged open-source technologies such as Cytoscape to **design an intuitive user interface, enabling simplified governance model development** without the need for chain code redeployment
- Conducted literature reviews on decentralized governance models, **contributing insights that informed platform development** and strategic direction

EDUCATION

Georgia Institute of Technology

Masters of Science in Computer Science

Toronto Metropolitan University

Honours Bachelor of Science in Computer Science

PROJECTS

DeepTrade: Predicting the Future of Stocks | Python, SkLearn, NumPy

- Developed a **Long Short-term Neural Network (LSTM) to predict the next day opening price** of any publicly traded company on the NYSE and NASDAQ
- Automatically sourced real time data from the Yahoo Finance API to ensure data quality

PintPredictor: Data-Driven Beer Style Discovery | Python, SkLearn, Pandas

- Constructed an unsupervised machine learning model capable of classifying beer styles, showcasing proficiency in data analysis and machine learning
- Utilized the **KNN algorithm to identify similarities between various beer types**, validating results through the elbow method