Michael Kokorudz

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EDUCATION

Queen's University — Kingston, ON
Bachelor of Applied Science in Applied Mathematics and Computer Engineering - GPA 4.0 — *Class of 2026*
- Principal's Scholarship ($4,000), Dean's Scholars Distinction, Annie Bentley Lillie Prize in First-Year Calculus

WORK EXPERIENCE

Software Development Intern — Summer 2024
KYC2020 LLC — *Remote*
- Developed a RESTful service with Spring Boot and Elasticsearch, predicting gender and nationality from name data.
- Collaborated in a fast-paced startup, delivering demos and updates to the data team and the CEO.
- Managed a younger intern and led two of their projects, ensuring 100% on-time delivery with high accuracy.

Horticultural Summer Student — Summer 2024
Hamilton-Wentworth District School Board — *Hamilton, ON*
- Worked in 2-3 person teams to maintain school grounds across 7+ schools in the district.

EXTRACURRICULAR EXPERIENCE

Capital Analyst — Spring 2024 – Present
Queen's University Business and Engineering — *Kingston, ON*
- Engaged in team-based presentations on stock pitches, industry reports, and financial market valuations.
- Managed a portfolio along with other analysts to achieve a favorable ROI.
- Presented research and investing activities internally to the QUBE Capital Team.

Algorithmic Trading Developer — Fall 2023 – Present
Queen's University Algorithmic Network & Trading Team — *Kingston, ON*
- Collaborated with a team of 5 to develop a Python-based trading algorithm.
- Concluded with a presentation of the trading algorithm to a panel of industry experts, sponsors, and club executives.

PROJECTS

Gender and Nationality Prediction Model | *Maven, Java, Spring Boot, Elasticsearch, Excel* — Summer 2024
- Prepared data in Excel for batch indexing into Elasticsearch, handling data for 200,000+ names efficiently.
- Implemented batch processing for optimized Elasticsearch multi-search queries, reducing execution time by 60%.
- Developed a multi-threaded API, utilizing Spring Boot's @Async annotation to handle concurrent requests.
- Designed the API to facilitate future integration into AI decision-making models for KYC2020, aiding in AML compliance.

Machine Learning Stock Trading Algorithm | *Python, QuantConnect, TensorFlow* — Winter 2023
- Created a predictive model using Keras and TensorFlow for Bitcoin price movements leveraging machine learning.
- Assessed historical data on QuantConnect to perform predictions, achieving 55% accuracy with algorithmic trading.

Multi-Agent Shuttle System | *MATLAB* — Fall 2023
- Collaborated in a team to model a multi-agent shuttle system for efficient transportation around Queen's University.
- Implemented Lloyd's Algorithm in MATLAB to simulate routes for 10 shuttles on Queen's campus.
- Designed shuttle stops based on a mock density map, optimizing for student housing areas.

TECHNICAL SKILLS AND INTERESTS

Languages: Java, Python, C/C++, MATLAB
Frameworks/Libraries: Elasticsearch, Spring, Spring Boot, JUnit
Developer Tools: Eclipse, VSCode, Maven, Git, QuantConnect, Microsoft Office 365, Google Workspace, SOLIDWORKS
Interests: Previous varsity Soccer athlete. I also enjoy playing golf, fishing, working out, and playing intramural basketball.