

Nicholas Belev

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CS & Finance McGill senior (3.94 GPA) with enterprise experience at Santander in data science & IT audit. Built Fintech software powering real-time wealth-management. Seeking full-time roles in data analytics, IT consulting, and quant finance.

EDUCATION

B.Sc. Computer Science & AI ▪ **Minors:** Mathematics, Finance | [McGill University](#) | *Montreal, QC* CGPA: 3.94
▪ Exchange Semester in CS & AI | IE University | *Madrid, Spain* (Winter 2025) Graduation: May 2026

Key Courses: ▪ Artificial Intelligence ▪ Machine Learning ▪ Data Science ▪ Statistics ▪ Algorithm Design ▪ NLP
▪ Quant Risk Management ▪ Corporate Finance ▪ Investment Management ▪ Financial Accounting

PROFESSIONAL EXPERIENCE

Data Analytics Intern, Internal Audit | [Santander Bank](#) | *Boston, MA* Jun 2025 – Present

- Co-led Santander's **first AI audit** by designing adversarial prompt corpus and automating **IBM WatsonX** API testing pipeline. Calculated and graphed failure metrics for prompt injection defenses and PII handling. Identified and remediated critical guardrail vulnerabilities.
- Built and published a Power BI dashboard backed by **Oracle SQL** and **DAX** to track and forecast workload for **150-person** IA department.
- Refactored Anti Money Laundering (**AML**) audit tool. Streamlined **TF-IDF** vectorization and **fuzzy matching** of sanctioned aliases. Achieve a **3x** speed improvement.

Quant Analyst & Software Developer | [Northfield Information Services](#) | *Boston, MA* May 2023 – Sep 2024

- Implemented “Householding” **portfolio optimization algorithm** in Python using Northfield's API, powering investment strategies for **CN Rochdale**, a **\$65B** high-net-worth wealth manager.
- Constructed Python/SQL analytics pipelines to extract time-series and cross-sectional risk factors, providing volatility monitoring, risk exposure detection, and quantitative risk alerts for client portfolios.
- Automated migration of **16,000+** legacy files into PostgreSQL with Python; built and Docker-deployed a FastAPI service for internal data access, enabling **sub-100 ms** queries for quant models.

Financial Director | [McGill University Sailing Team](#) | *Montreal, QC* Nov 2023 – Present

- Manage **\$100K** in assets. Prepare annual budget. Reconcile and report financial statements for tax / audits. Negotiate yacht club contract.
- Built forecasting models to project expenses (**96% accuracy**) & inform capital planning for new fleet. Optimized cost-performance by **1.5x**.
- Co-led “McGill24” fundraising initiatives, growing team current assets by **\$20K** in **1 month**.

TECHNICAL EXPERTISE

Languages & Frameworks – Python (scikit-learn, pandas, NumPy, FastAPI, NLTK), C/C++, Java, Solidity (Ethereum), OCaml
Data Analytics – Snowflake, SQL (PostgreSQL, MS SQL Server, Oracle SQL), Power BI, Excel (VBA), Jupyter/Colab, R
DevOps & Workflow – AWS (EC2), Docker, Git/GitHub, Linux/Unix & Bash, LaTeX

PROJECTS

Stock Evaluation Utility Dec 2022 – Apr 2023

- Developed a Python application to evaluate probable stock over- or under- valuation and accurately forecast future performance.
- Collected financial statements and stock data from Yahoo Finance using **Pandas**, **Requests**, and **Selenium** libraries.
- Calculated fundamental analysis ratios and derived **multivariate regression** to capture momentum and reversals in stock behavior.

AI Agent for Othello (on [GitHub](#)) Oct 2024 – Dec 2024

- Implemented an Othello playing AI agent, leveraging **Alpha-Beta pruning**, iterative deepening **Minimax**, and **Zobrist** hashing.
- Designed a game-state evaluation heuristic factoring stability, mobility, and board control. Operates under **2s / 500 MB** constraints.
- Achieves superior performance: **100%** win rate vs. Greedy agents, **99%** vs. Stochastic, and **80%** vs. top peer Minimax agents.

Gaze Tracking Computer Vision Software (on [GitHub](#)) Jan 2025 – May 2025

- Built a real-time gaze-tracking system with **OpenCV** and **MediaPipe**; mapped visual focus using perspective transforms and **heatmaps**.
- Analyzed user attention patterns to inform magazine cover design. Applied data-driven insights on page layout and color optimization.