

Arina Veprikova

Canada (open to relocation) | Available May 2026

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TECHNICAL SKILLS

Languages: Python, SQL, R, C++, Java, MATLAB

Analytics & ML: pandas, NumPy, scikit-learn, time-series forecasting, feature engineering, cross-validation, out-of-sample evaluation

Data & Systems: SQLite (schema design, queries), BigQuery (analytics + forecast workflows), Git/GitHub

BI & Visualization: Power BI, Tableau, matplotlib, plotly, ggplot2, TradingView (Pine Script overlays)

Excel: PivotTables, XLOOKUP/INDEX-MATCH, SUMIFS, data validation, conditional formatting, audit-ready templates

EDUCATION

Simon Fraser University (SFU)

Burnaby, BC

BSc, Data Science (Minor: Finance) — Expected 2028

Entering 3rd year (Jan 2026)

Selected coursework: Database Systems (CMPT 354), Data Structures (CMPT 225), Linear Algebra, Linear Optimization, Business Statistics, Accounting, Economics

PROJECTS

Canada-Compliant Market Inefficiency Finder (Crypto) <https://github.com/areenve/market-inefficiencies> (Python, SQLite, TradingView (Pine))

- Built an end-to-end pipeline to stream public BTCUSD quotes and store tick-level bid/ask/mid data in SQLite for reproducible, audit-friendly research.
- Implemented inter-venue spread/dislocation detection (bps) with realistic trading frictions (fees + half-spread + slippage), including a **6 bps** total-cost threshold and a **300 ms** persistence filter to reduce noise.
- Produced reviewable outputs (event intervals, KPIs, histograms/time-series plots) and TradingView overlays to validate signals directly on charts.

Portfolio Risk Dashboard (Power BI, Python/SQL) <https://github.com/areenve/portfolio-risk-dashboard>

- Designed an interactive dashboard to monitor portfolio value, daily return & 30D volatility, drawdowns, and top risk contributors with slicers by date, asset class, and sector.
- Implemented stress-scenario views (baseline vs shock windows such as COVID crash / worst 30 trading days) to communicate downside behavior clearly to non-technical users.

Multifractal Features for Cross-Sectional Volatility Forecasting (S&P 500) (R/Python) <https://github.com/areenve/fractal-vol-forecast>

- Built a daily panel from WRDS exports (returns + market cap) and enforced a strict train/test split for credible out-of-sample evaluation.
- Implemented HAR-L baselines (OLS + leverage proxy) and extended them with MF-DFA features on rolling **252-day** windows (ΔH , $H(q=2)$, τ -width).
- Trained Elastic Net (CV-selected regularization) and quantified horizon performance (5/10/22 trading days), comparing baseline vs MF-augmented models to test whether structure improves forecast accuracy.

EXPERIENCE

LLC "AuditDelo"

Irkutsk, Russia

Junior Accountant / Data Analyst

Feb 2022 – Dec 2024

- Automated recurring audit workpapers in **Excel** (templates, validations, standardized controls), cutting prep time per organization by **~40%** and improving traceability.
- Processed and QA-checked **~10 organizations/week** (annual audit documentation), maintaining accuracy and consistent formatting under tight deadlines.
- Reconciled exceptions across client records and audit requirements; partnered with auditors, senior managers, and client finance teams to resolve discrepancies and submit final packs on time.
- Supported AR follow-ups with counterparties on outstanding balances; maintained records in **Excel** and **1C** with strict confidentiality.
- Improved throughput by refining checks and workflow (from **5–10 hrs** per org initially to **1–3 hrs** depending on complexity).

ACTIVITIES

CAN-CWiC Poster Presenter | SFU Data Science Club Member | SFU DSSS Hackathon Participant (2026)