

# ROBIN BILODEAU

Ottawa, Ontario, Canada

rbilo073@uottawa.ca ♦ (+1) 613 371 1300 ♦ linkedin.com/in/robin-bilodeau ♦ github.com/RobinB1lo

## EDUCATION

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### University of Ottawa

Ottawa, Ontario, Canada

*Bachelor of Science in Computer Science and Mathematics*

Sep 2023 – Apr 2027

- **Relevant Courses:** Intro to Computing 1, Intro to Computing 2, Linear Algebra, Discrete Mathematics for Computing, Business Analytics, Statistics for Management

## WORK EXPERIENCE

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### Westmount Capital Partners

Ottawa, Ontario, Canada

*Investment Banking Intern*

Apr 2023 – Aug 2023

- Analyzed and modeled 3-statement projections, and acquisition financing scenarios for a 115 million dollar transaction
- Assisted in debt structuring for a 10 million dollar convertible note and 2 million dollar bridge loan
- Conducted market research and prepared pitch materials for capital raising, resulting in 250 million dollars of commitments

## RESEARCH EXPERIENCE

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### Uncertainty-Aware Statistical Extensions for HDBSCAN Clustering

Ottawa, Ontario, Canada

*Undergraduate Researcher*

Apr 2025 – Present

- Collaborated with a Professor to architect a rigorous benchmarking suite, curating diverse synthetic and real world datasets and formalizing metrics, cluster stability, and confidence interval accuracy for systematic evaluation of new algorithm variants.

## PROJECTS

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### OrderBook Implementation for Financial Markets

- Developed a real-time order book system using FastAPI to handle order placement, trade execution, and order cancellation with low-latency API responses.
- Implemented Enums (StrEnum) to enforce consistency in order types (LIMIT, MARKET, FOK) and order sides (BUY, SELL), improving code maintainability.
- Integrated Yahoo Finance API for real-time price fetching and enabled seamless interaction between the back-end and front-end via CORS and static file hosting.

### Moving Averages Crossover Strategy

- Developed a Python-based simulator to analyze trading strategies using moving averages crossover techniques, integrating stock market data via the yfinance library
- Implemented a dynamic portfolio simulation module that calculates holdings, cash balances, and portfolio returns, offering insights into the risk and profitability of the strategy
- Visualized key performance metrics, including stock price trends, moving averages, buy/sell signals, and portfolio performance, using matplotlib for data-driven decision making.

## LEADERSHIP AND ACTIVITIES

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### IMC Prosperity Trading Competition

Ottawa, Ontario, Canada

*Team lead*

Apr 2025 – May 2025

- Developed and implemented multiple algorithmic trading strategies, including market making, an ETF mispricing strategy using the Kelly criterion, and a Black–Scholes neutral delta options strategy
- Engineered robust, adaptive algorithms to exploit market microstructure inefficiencies and option pricing dynamics, showcasing advanced capabilities in risk management, statistical modeling (using NumPy and similar libraries), and algorithm optimization across diverse asset classes

## SKILLS, LANGUAGES, INTERESTS

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- **Languages:** English (Native speaker), French (Native speaker)
- **Soft Skills:** Public Speaking, Communication, Leadership
- **Programming:** Python, SQL, Java, Typst
- **Tools:** Microsoft Word, Git, Visual Studio Code, Canva
- **Libraries:** matplotlib, numpy, Scikit-learn, Jupyter, pandas, Tkinter, yfinance
- **Athletics:** Boxing, Hockey, Soccer, Volleyball

- **Interests:** Reading, Guitar, Movies, Farm/Cottage, Travel, Innovation and Technology, Entrepreneurship