

# Jake Hoffman

Toronto, ON 14jakehoffman@gmail.com

Tel: 647-823-4504

LinkedIn

[jakethehoffer.github.io/website](https://jakethehoffer.github.io/website)

## SUMMARY OF QUALIFICATIONS

- Computer Engineering student with a strong foundation in software engineering principles, technical problem solving, and design analysis.
- Proficient in Python, Java, C, C#, C++, SQL, Git, Word, Excel, JavaScript, Dart, Unity, FastAPI, Playwright, Monday.com, and Google Apps Script.
- Writes clean and maintainable code with attention to testing, logging, and performance.

## EDUCATION

### 3rd Year at Queen's University

September 2023 – Present

#### *Computer Engineering*

- Cumulative GPA of 3.85 with distinction of Dean's Scholar.
- Developed a pathfinding algorithm in Python for autonomous operation of a rover.

## EXPERIENCE

### IT Intern

Jun 2024 – Aug 2024; Jun 2025 – Aug 2025

#### *Lynx Equity Limited*

- Developed a task management system on Monday.com, streamlining communication between subsidiary companies and internal departments by automating issue routing to the appropriate workflow queue.
- Built an On/Off-Boarding workflow in Monday.com, standardizing role-based tasks, handoffs, and approvals; delivered a stakeholder demo and incorporated feedback into the final product.
- Developed Google Apps Script solutions in JavaScript that select and import data from multiple Excel exports into a single Google Sheet, apply pricing logic, and track unmatched keys for reconciliation. Added a Sheets custom menu and routines to handle large datasets, plus logic to dynamically accept changing Excel file IDs.

### Game Developer (Independent)

January 2024 – March 2024

#### *Mega Tic-Tac-Toe*

- Designed and programmed a Unity game built on a 3×3 grid of linked Tic-Tac-Toe boards where each move determines the opponent's next board, and winning a board claims one square on the grid.
- Supports local and online multiplayer, and single player vs. computer with multiple difficulty levels.

### Design Team Member

October 2023 – March 2024

#### *QMIND – Queen's AI Hub*

- Worked on a team project to train an agent to play Blackjack using reinforcement learning.

## PERSONAL PROJECTS

### trader (Python · IBKR · Finnhub · pytest)

- 24/7 AI swing-trading agent for S&P 500 equities, driven by six scheduled, idempotent routines.

### Odds Aggregator (Python · Playwright · SQLite/Alembic · FastAPI)

- Production arbitrage daemon covering 10 bookmakers across 6 sports.

### tax-rebalance (Python · async SQLAlchemy 2 · httpx · pytest)

- Canadian TFSA + RRSP portfolio drift monitor — emails weekly digests with cost-aware rebalance verdicts (read-only; never places trades). Spec-driven TDD: 21-task plan, two-stage independent review, 117 tests, ruff-clean, CI on Py 3.11 + 3.13. Questrade IQ API with OAuth refresh-token rotation.

### equity-arbs (Python · asyncio · SQLAlchemy 2 · statsmodels · pydantic)

- Stat-arb research toolkit for TSX pair trading (spec-first, TDD, 76 unit tests). Decision-grade backtest demonstrated a ~0.6%/yr ceiling on retail capital; retired at v1.0 with the toolkit as a reusable research asset and a documented negative result.

Writing: [jakethehoffer.github.io/website/#writing](https://jakethehoffer.github.io/website/#writing) — short essays on engineering tradeoffs.