Anthony Le

+1 (740) 281-9239 • anthony.hn.le@gmail.com • LinkedIn • GitHub • Personal Website

Education

Denison University, *Granville, OH* — ***Aug 2027***

BS, Applied Mathematics (3.8) | BA, Financial Economics (4.0) | Minor, Computer Science (4.0) — *GPA: **3.9**/4.0*

- **Honors & Awards**: Top 27, CME Global University Trading '25 | Top 200 US, IMC Prosperity 4 '26 | 2nd Place (2x), BoA ECON Games '25-'26 | Dean's List (5 semesters) | **National Finalist** (2x), Vietnam's Math Olympiad '21-'22
- **Coursework**: Time Series Analysis, Probabilistic Modeling, Statistical Theory, Advanced Differential Equations, Advanced Econometrics, Real Analysis, Advanced Linear Algebra, Financial Markets, Derivatives, Data Structures
- **Self Learning**: Certified Futures & Options Analyst (**CFOA**) | Akuna Capital's Options 201 | **Baruch Pre-MFE**: Adv. Calculus, Numerical Linear Algebra, Statistics, ODE/PDE | **Quantopian**: Stochastic Calculus, ML in Finance

The London School of Economics and Political Science, *London, UK* — ***AY 26/27***

Full-Year Study Abroad - The General Course

Experience

Denison University, Dept. of Economics, *Granville, OH* — ***May – Jul 2026***

***Undergraduate Research Fellow** | ML vs. Econometric Volatility Forecasting*

- Engineered a walk-forward pipeline in **Python** across **18 equities** (∼72,000 observations), benchmarking **11 models** of **GARCH, HAR-RV, Random Forest, XGBoost**, and **LSTM** with 96 monthly refits
- Constructed a **31-predictor feature matrix** (volatility lags, return dynamics, microstructure, VIX signals); identified lagged realized volatility (**28.5%**) and 20-day maximum absolute return (**18.6%**) as the top predictors
- Designed four portfolio backtesting strategies with transaction-cost modeling; found that **GJR-GARCH(1,1)** with **Variance-Risk-Premium** strategies achieved the best trading performance (Sharpe **2.96**)

Liberfield Capital, *New York City, NY* — ***Jun – Aug 2025***

***Investment Analyst & Trader Intern** | Private Fund Focused on Alternative Investments | Website*

- Conducted equity research, performed macro analysis, and built valuation models (**DCF, DDM, comps**) for an investment pitch on **Cameco** (NYSE: CCJ) to the Managing Director and a panel of other fund professionals
- Achieved **15% ROI** on a **$100K simulated portfolio** over 4 weeks, trading futures and options with 5 teammates
- Applied time-series models and factor analysis to macroeconomic indicators (GDP, CPI, rates, volatility) to anticipate market moves and support weekly investment committee meetings

Projects

Limit Order Book Simulator | *C++20, WebAssembly, Next.js* — ***Jul 2026***

From-Scratch CLOB Matching Engine Compiled to WASM for a Live In-Browser Trading Demo | App | Code

- Built a **C++20** Central Limit Order Book with price-time priority matching; verified via a **differential fuzzer** against a naive O(n) reference across **200K+ iterations** and 3 independent seeds
- Benchmarked with **Google Benchmark**, confirming O(1) insert/cancel scaling to 100K depth; compiled to **WebAssembly** behind a live **Next.js** demo with order book, depth chart, and Taker/Maker PnL

Implied Volatility Surface | *Python, Next.js, TypeScript* — ***Jun 2025***

Live 3D IV Surface Visualizer Using Black-Scholes and Real-time Options Data | App

- Built a numerical root-finding **Black-Scholes-Merton** implied-vol solver over live options chains (via **yfinance**), rendering an interactive **3D IV surface** across strikes and maturities with **Plotly**
- Rebuilt from a Streamlit prototype into a **Next.js** frontend backed by a **Vercel Python serverless** function to eliminate cold-start latency, handling illiquid/zero-bid contracts and sparse strike-maturity interpolation

Additional Information

Technical Skills: Coding (Python, R, C++, SQL, Stata, LaTeX, Next.js, TypeScrypt), Bloomberg Terminal, MS Office

Campus Involvement: Economics Fellow, Teaching Assistant (Mathematics & Economics), Docent (Admissions), Community Advisor (Housing), Student Ambassador (Annual Funds), Denison Investment Club

Languages: English (bilingual – SAT 1540/1600 & IELTS 8.5/9.0), Vietnamese (native), Mandarin (fluent in speaking)

Interests: Running (2 sub-2:30 half-marathons), Chinese historical drama series, Meditation & yoga (30-min daily)