Yevhenii Foia

Chicago, IL. | (312) 776 9367 | evgeniyfoia@gmail.com

EDUCATION & HONORS

University of Illinois at Chicago
BS in Information & Decision Sciences | GPA: 3.74/4.00   *Graduation date: May 2025*
● Specialization in Financial Engineering | Dean's Honors List | L. Kirstein Scholarship 2022 Laureate

Stanford University
Artificial Intelligence Professional Program   *August 2023 - May 2024*
● Machine Learning, Development & Automation | Algorithm Invention | A.I. Transformation

Akuna Capital
Options 101 & 201 Program   *Nov 2023 - Feb 2024*
● Vol-Term Structure | Volatility Trading | Options Market-Making | Boolean Operators and Latency

QUANTITATIVE EXPERIENCE

Irregularity of Volatility Skew in Crypto Options | *Thesis Project - Python*   *Dec 2023 - June 2024*
● Conducted research on unconventionality of the Vol. Skew in Crypto (BTC & ETH) options. Created 2 Vol-arbitrage strategies using sentiment biases, TaLib, BT and CCXT libraries with the Binance exchange.

Bond Market-Making Program | *Project - Python*   *Oct - Nov 2023*
● Created a paper-trading Python-based bond market making program utilizing quantitative models for pricing and risk management, achieving consistent profits through efficient liquidity provision and spread capture.

Auto Delta-Hedging Algorithm | *Project - Python*   *Aug - Oct 2023*
● Developed a dynamic Option Portfolio hedging algo using Numpy & Pandas. Created low-latency functions to auto-adjust dataframes and maintain a continuously delta-neutral portfolio of 100+ European Options.

WORK EXPERIENCE

UIC OVCI Finance | *Financial Analyst* | Chicago, IL.   *June 2022 - Present*
● Prepared and reconciled financial statements and projected expenses with an annual volume of over $45 million. Validated budget caps by modeling random walks of expenditures to avoid potential deficits.
● Provided and implemented optimizations based on various performance metrics and seasonal trends that yielded an 11% YoY reduction of costs in FY2023.

PwC | *Tech Consulting Summer Associate* | Chicago, IL.   *June - August 2023*
● Implemented new data management solutions into a first-of-its-kind Online Education startup with over 6M active monthly users. Data mined the five most underserved user requests and helped address them quickly.
● Led a team of 4 interns to refine analytical tools of the client's systems, improving latency and allowing clients to interpret complex datasets and always make data-driven decisions.

LEADERSHIP EXPERIENCE

UIC Finance Pro App | *Machine Learning Developer* | Chicago, IL.   *Oct 2023 - Feb 2024*
● Architected and developed a Python LLM-based A.I. virtual assistant app for the University of Illinois' Finance department, trained the underlying open-source LLM on 1.1M additional custom tokens.
● Consulted the teams of 60+ employees on implementation and deployment, yielding increased employee efficiency along with a $240,000/yr projected labor cost optimization.

SKILLS & INTERESTS

Technical: Applied Mathematics | Data Analysis | Python | Pandas | Scikit | PyTorch | R | SQL | VBA | Jira | Blockchain development | ML & A.I. development | Derivatives Trading | Bloomberg Terminal

Interests: *Mathematics*: Top 50 Score on the National Math Exam. *Chess*: 1600 Elo. *Favorite book*: Fooled by Randomness. *Equities*: 4 years of experience in portfolio management & derivatives trading.

How a parking ticket swept me into Quantitative Finance

By Yevhenii Foia

Ignorance

There I was, a skinny, drenched freshman running down the slippery sidewalks of the University of Illinois, guarding my laptop from the pouring rain to the best of my ability. It was a bad day for my student parking garage to be full, I thought to myself. I was making my way from class to the metered hourly parking lot that I was forced into that day. As I was crossing my final obstacle, a Lake Michigan of a puddle, I saw a little yellow packet on my windshield - the parking had expired by 20 minutes, and there was the ticket.

As I picked it up, I was relieved: "Only $20!" I said out loud. One half of me was pleased, as that's only double the daily rate at my student garage. Still, my other half was stumped by the probability of the university's only parking enforcement car getting me within that short of a time.

Inception

As I pitifully sat down in the car, holding the ticket and thinking about what are the chances, my mathematical mind caught myself thinking: But wait, what are the chances? It had to be incredibly low. Given that from my job at the University's Finance department, I knew there's only one parking enforcement car per what is almost a 250-acre campus. Coupled with the fact that each ticket would only be $20, what if I stopped parking in my $10/day student parking garage, and just pay the tickets whenever I get caught unmetered on the open lot? What would be a lower expected expense? There was only one way to find out. Over the course of what would have been a 16-week, 5 days per week, $10 per day: $800 semester, I honorably and honestly paid 8 parking tickets at $20 each, totaling $160. My theory about a favorable probability was proven correct.

A few weeks later, I told one of my finance professors about this amusing experiment. He laughed and applauded me for my wit, saying that he had never seen someone run a statistical arbitrage strategy against the parking meters. Statistical Arbitrage? I asked. At the time I had never heard of the concept he mentioned, but the name in itself instantly clicked.

It clicked.

After elaborating on the term, he took me on a little tangent. I was struck with a feeling of enlightenment. I was introduced to Quantitative Finance, a sphere I had never heard about before, and my inner math nerd has never been so joyous. I discovered that all my hard-earned Soviet-style mathematics and statistics knowledge could, and frankly, should be, combined with my sterling passion for Finance and Trading. I realized I always had all the required puzzle pieces; I just needed that first corner piece to be established. And turns out that in our world full of randomness and probabilities, sometimes the missing, passion-commencing corner piece - is a soggy yellow parking ticket.

- Yevhenii Foia
evgeniyfoia@gmail.com