Ark K, CFA*, CQF, FRM

650 888 8387 | aa.auxiliarymail@gmail.com | aa-kl.github.io | aa-kl | aa-kl | @aa_tgm

Authorized to work in the US, Green Card

Summary

A seasoned financial professional with robust skills in statistics, econometrics, quantitative finance, and portfolio optimization, bolstered by proficiency in machine learning and reinforcement learning. My career progression led me through diverse roles, where I demonstrated a knack for leading market-making activities, executing client transactions, and providing robust liquidity across a plethora of financial instruments. I'm recognized for my strategic portfolio management, effective trading strategies, and statistical prowess in evaluating trade risks. I've led cross-functional teams in legal and operational roles and successfully negotiated derivative trading legal frameworks. My expertise extends to the development and refinement of trading tools, valuation models, and risk management frameworks, which have contributed to the improvement of financial stability and performance metrics. While working in highly regulated environments, I ensured adherence to regulatory compliance requirements. I've excelled in providing advisory services, preparing detailed reports, and delivering high-impact presentations to stakeholders

Experience

GPB, one of the largest domestic banks with an extensive international market presence — **Oct 2018 – Jan 2023**
IR and FX Trader | Fixed Income, Currencies and Commodities desk, Capital Markets — **Moscow, RF**

- Conducted market making, executing client transactions, and providing clients with liquidity across various financial instruments.
- Managed portfolios strategically, minimizing basis risk and maintaining credit quality, improving risk-adjusted returns.
- Conducted comprehensive market analysis, providing valuable insights to management, sales teams, and clients.
- Collaborated with the asset/liability management department to refine investment allocations, enhance hedging strategies, and optimize funding ratios.

Relevant Projects:

- ✓ Developed and implemented an Interest Rates Option pricing engine with volatility surface calibration and modeling (Black-76), leading to more accurate pricing and risk management.
- ✓ Led the launch of new instruments pricing and liquidity providing (Key Rate IRS and Caps/Floors, FX-implied swap), ensuring adherence to ISDA regulations.
- ✓ Developed IR pricing tools, launched liquidity provision for IR products to Bloomberg screen and bbti (C#, VBA, Bbg API).

PSB, one of the top privately held local banks, with cutting-edge technologies in trading — **Nov 2012 – Sep 2018**
e-FX Trader | electronic FX and Precious Metals trading desk — **Moscow, RF**

- Executed electronic client trades and provided liquidity in G10, and CIS currencies (Short Term IR and FX Spot/FX Swaps).
- Monitored and managed risk in commodities transactions: energy, agricultural, metals flow trading.
- Managed and supervised an e-FX sales team and programmers, setting goals, and improving client outcomes.
- Covered all business and technical aspects of electronic trading (prime brokers, legal, infrastructure vendors)

Relevant Projects:

- ✓ Developed feeds collecting and smart order matching engine from scratch (C#, FIX, SQL), increasing efficiency and accuracy.
- ✓ Established transition to UDP protocols, added feeds from the exchange-traded D1 derivatives market (FAST, Plaza), improving system performance.
- ✓ Developed proprietary client-server trading application for FX basket trading (FIX, Sockets, WPF).
- ✓ Integrated statistical arbitrage algorithms (CME-MOEX), retail customers flow, and high correlated ccy-pairs liquidity extraction into the order routing and matching circuit

Education

CQF Institute, Fitch | Quantitative finance programm, Leading Professor: Dr. Paul Wilmott — London, UK
Quantitative Finance Charter — Jan 2022 – Jul 2022

New Economic School | Morgan Stanley programm, Rector: Dr. Sergey Guriev — Moscow, RF
Masters in Finance — Sep 2013 – Jul 2015

National Research Nuclear University "MEPHI" | Applied Maths in Economics programm — Moscow, RF
Economist Mathematician — Sep 2007 – Jul 2012

Certificates

CFA Charter*, **CFA Institute** || FRM Charter, **GARP** || CQF Certificate, **CQF Institute** || SIE Passed, **FINRA**

Skills

Math: statistics, econometrics, quantitative finance, portfolio optimization, machine learning, reinforcement learning
Programming: C#, Python, .NET, QuantLib, QuickFIX, sklearn, pyfolio, Git, WPF, sockets, multithreading, bash, SQL, VBA, LaTeX
Software: Numerix, Calypso, Murex, Misys Summit, Refinitiv, Bloomberg, Reuters Dealing, 360T, FXAll, FastMatch, Integral, MS Excel
Protocols: FIX, FAST, PLAZAII, Bloomberg API, numerous ECN APIs, Open AI API, SSH **Other Interests:** PCB Design, 3D, Rowing

Awards

Won trading competition "Algorithmus 2012", nomination "Stable Income" (highest sharpe ratio).
Asset class: Equities. Strategy: fractal MA, B. Mandelbrot

* *Successfully completed all three levels of the CFA program, currently in the process of obtaining membership*