NIKITA ALEXEYCHUK

EDUCATION

2015–2017 **MA**, *Lomonosov Moscow State University*, Moscow, Probability Theory and Statistics Department. (Expected GPA 5.0).

Core Modules: Probability Theory, Applied Statistics

- Participated in Statistical laboratory under Andrei Chertok (Sberbank Head of R&D)
- Thesis Title: "Quantile regression and Conditional transformation models"
- Improved and implemented portfolio optimization algorithm based on Markowitz portfolio and alpha decay
  that outperformed original Markowitz portfolio by better Sharpe ratio on most datasets

2010–2015 **BA**, *Lomonosov Moscow State University*, Moscow, Operation Research Department. (GPA 4.4).

Core Modules: Game Theory, Optimization Theory, Graph Theory

- Helped in organization of CMC career fair
- Thesis Title: "Semismooth Newton methods for nonlinear complementarity problems"
- Created and implemented new optimization algorithm for nonlinear problems that outperformed speed of classical
  Newton methods approximately by 20%

PROFESSIONAL EXPERIENCE

2018 Jan – present **R&D Department**, *Sberbank*, Moscow.

- Creation and implementation of models of money management for Banking Book department.
- Developed optimization system for warehouses of Sberbank
- Participation in smart business data analysis (inner consulting).
- Developing pipeline for data routines.
- Instruments: Python, Linux

2017 Jul – 2017 Dec **Specialist/analyst**, *Sberbank CIB*, Moscow.

- Developing soft that controls trades and conditions.
- Created models for checking non-liquid derivatives pricing
- Instruments: Python, Bloomberg terminal

2016 Jan – 2017 Jun **Quantitative researcher (Global Tactical Asset Allocation portfolio)**, *Basis Capital*, Moscow.

- Research of markets of different countries. Implemented trading strategies for bonds, equitiers, commodities
  and FX markets
- Created R-based system that collects smartly data from Bloomberg terminal and exports it to our database
- Instruments: R, Bloomberg terminal

2016 **Trader, Lecturer**, *FINAM*, Moscow.

- Created trading strategies for Russian stock market (MOEX)
- Read statistical lectures course
- Instruments: C#

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2015–2016 **Developer of backtest system**, *Settling own trading firm*, Moscow.

- Developed backtesting system
- Performed US equity market analysis
- Instruments: Python

2014 **Market Analyst**, *SPRIN-G*, Moscow.

- Created financial macro-based models to estimate company value
- Instruments: Excel, Python, SQL

2013 **Quantitative researcher**, *Euphoria Fund*, Moscow.

- Performed statistical analysis of macroeconomic factors
- Instruments: Excel, Python, SQL

ACADEMIC EXPERIENCE

2016–2017 **Research assistant**, *Lomonosov MSU*, Moscow.

- Teaching experience: probability theory
- Conducted research of American stock markets (NYSE, NASDAQ)
- Developed market simulation system that was more accurate than older one
- Improved quality of collaboration and presentation that resulted in 2-times increase seminar participation rate
- Instruments: R, Matlab, Python

2016 **Optimization**, *Lomonosov MSU*, Moscow.

- Implemented hybrid step Newton algorithm for solving NCP
- Proved convergence of that algorithm
- Instruments: R, Matlab

2015 **HFT Trading Project**, *Lomonosov MSU*, Moscow.

- Developed triangular arbitrage system
- Built HFT system based on MOEX FIXED protocol that improved transaction speed
- Developed market simulation system that was more accurate than older one
- Instruments: C++, Matlab

TEACHING EXPERIENCE

2018 **Sberbank AI academy**, *Sberbank*, Moscow.

- Course about machine learning techniques (regressions, classification problems).
- Usage Python for machine learning.
- Instruments: Python

2015–2016 **FINAM Lecturer Finance Courses**, *FINAM*, Moscow.

- Teaching experience: lectures about statistical models, cointegration, regression, etc...
- Programming course (explained about usage of Python for trading)
- Instruments: Python

2016–present **Teaching Assistant**, *Lomonosov MSU*, Moscow.

- Teaching experience: probability theory
- Improved quality of collaboration and presentation that resulted in 2-times increase seminar participation rate
- Instruments: R

PROJECTS

2016–2017 **Research assistant**, *Lomonosov MSU*, Moscow.

- Teaching experience: probability theory
- Conducted research of American stock markets (NYSE, NASDAQ)
- Developed market simulation system that was more accurate than older one
- Improved quality of collaboration and presentation that resulted in 2-times increase seminar participation rate
- Instruments: R, Matlab, Python

PRESENTATION

2016–2017 **Lecturer**, *FINAM*, Moscow.

- Speaking about PCA method to build arbitrage strategies
- Wrote public available framework for PCA constructing portfolios
- Instruments: Python

2016 **Lecturer**, *MATLAB*, Moscow.

- Introduced framework for creating and testing trading strategies
- Introduced crowd sourcing public hedge-fund platform
- Instruments: Matlab

HONORS AND AWARD

University achievements, *Lomonosov MSU*, Moscow.

- Increased scholarship
- SAS certificate
- Financial risk-management certificate (MOEX course)
- University Newspaper Reporter Awards

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