Kirill Prokopov

prokopov.null@yandex.ru

Skills

Math: Probability, Statistics, Basic stochastic processes and calculus, Linear algebra, Real analysis, Numerical methods, Game theory;

Quantitative finance: BSM model, Risk-neutral pricing, Hedging,

Stochastic volatility models, COS method, Greeks(PW, LR, AD methods), Monte Carlo simulations, HJM framework, Short-rate models, IR derivatives, LSMC method;

ML/DL: Linear models, Decision trees, Random forest, Gradient boosting, CNN, RNN, GRU, LSTM, FCNN;

English language: Advanced;

Stack

Programming languages: Python

Scientific computing: JAX, Numba, Numba-CUDA API, Scipy, Numpy;

ML/DL: Pytorch, Sklearn;

CS: OOP, git;

Portfolio

https://github.com/Kirill-Prokopov/Portfolio

Education

MIPT'24 / Bachelor of applied physics and mathematics

Landau Phystech School of Physics and Research

Thesis: Modeling of filtration of light non-aqueous hydrocarbons (LNAPL) in the underground hydrosphere

New Economic School '26 / Master of Arts in Economics(MAE)

Courses:

Machine Learning for Physicists – SITxMIPT, Autumn 2021- Spring 2022

Financial Mathematics introduction – Vega, Spring 2024 (Audited, no exam)

Stochastic Volatility Models – Vega, Autumn 2024 (Audited, no exam)

Monte-Carlo methods – Vega, Spring 2025

Achievements

- ROSATOM physics olympiad – first prize
- MSU physics olympiad – second prize
- SAFMAR NES scholarship

Interests

-Financial Monte-Carlo simulations
- GPU computing
-Derivative pricing
-Time-series modeling