Artjoms Saprikins

Contacts

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Summary

Recent graduate with a focus on Finance and Macroeconomic Finance. Seeking a job in the field of risk management and credit risk. Highly skilled in programming and using econometric and statistical tools. Open to relocation, can consider remote or hybrid work.

Education

July 2023 (*expected*)
Master of Arts in Economics, **New Economic School**, Moscow
Thesis: "The interaction between macroprudential and monetary policies in Latvia"
Research project on the impact of foreign monetary shocks on lending behaviour in Latvian banks. Constructed an individual-level dataset by merging quarterly financial reports over a decade in Python. Designed and tested various model specifications, and implemented a suitable econometric approach in Stata. Empirical analysis shows a statistically significant negative correlation between Swedish and US monetary policy shocks and bank lending behavior in Latvia.

July 2021
Bachelor of Science in Applied Mathematics, **Bauman MSTU**, Moscow
Thesis: "Modeling an Electromagnetic Field using the Finite Element Method"
Designed and developed a C++ software package from scratch for numerical simulations of electrostatic problems by modeling equations of mathematical physics. The built-in class exhibited stable and stationary results that were comparable to theoretical calculations. Visualized modeled fields using Wolfram Mathematica.

Projects and Competitions

Apr 2023 — Mathematical Finance Project
Participated in a project on option pricing by modeling the Monte Carlo method in Python. Using calculated paths of asset price and volatility, developed an algorithm to estimate the expected payoff of the option. Calibrated results with the analytical solution for call option prices according to the Heston model option pricing formula.

Feb 2023 — Project on Risk Evaluation
Collaborated with a team of three to analyze risk measures for a selected fund at Raiffeisen Bank's Russian subsidiary. Successfully compared advanced approaches in VaR estimation and implemented the Monte Carlo method based on the GARCH model of asset returns in Python. Conducted backtesting using statistical tests and additional criteria of violations frequency.

Jan 2023 — Modeling Merton structural model
Practice on credit spread estimation of selected firms. Instead of the suggested iterative approach, proposed an effective and reliable algorithm in R that solves a system of two non-linear equations to find the asset value and asset return volatility. Using data on Enron and estimated results, calculated credit spreads at different maturities, which matched with historical data.

Oct 2022 — Machine Learning practice on Borrowers Classification
Task on classifying borrowers sample on defaulters. Along with the standard library, implemented my own class in Python to train a decision tree in a binary classification problem with the ability to handle real and categorical features. Defined the criterion to divide the sample, received high accuracy close to one.

Languages

Russian (Native), English (Fluent), Latvian (Basic)

Computer Skills

Programming Languages:	Python, C++, SQL
Statistical Packages:	Stata, R
Other:	Excel, Matlab, Wolfram Mathematica, Tableau