Yurchenko Vladimir

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EDUCATION

Moscow Institute of Physics and Technology

Spt 2021 - Present

Bachelor: MIPT and NES Joint Program

Current GPA: 4.70(from 5)

Courses:

Economic disciplines: Macroeconomics, Microeconomics, Game Theory, Introduction to finance, Data analysis in economics.

Computer science: C++, Python, Technology of Programming, Data Structures & Algorithms, Data Analysis, Parallel Computing, Databases, Golang

Mathematical disciplines: Machine learning, Statistics, Probability and Theory of Measure, Differential Equation, Discrete Math, Linear Algebra, Calculus, Mathematical Logic, Formal Language, Methods of Optimization.

Vega Institute Spt 2024 - Present

Additional education

Courses: Financial Econometrics, Introduction to Financial Mathematics, Game Theory

School of Quants: The Experts Spt 2024 - Dec 2024

Additional education

Courses: Stochastic Computing, ML for Trading, Python, C++

SKILLS

Financial: Financial analysis, Stochastic calculus, DCF / WACC, R, MS Office (financial modeling in Excel, pivot tables, complex formulas, PowerPoint)

Programming Languages: C/C++, Python, Golang

Tools & other skills: SQL(PostgreSQL), LaTeX, ML - pandas / numpy / sklearn

Languages: Russian, English(B2)

EXPERIENCE

Systems Analyst in the Cryptographic Analysis Department of Security Code 2025 Feb - Present: Optimization of digital signature algorithms and arithmetic on elliptic curves.

Intern in SBER Blockchain Laboratory 2024 Jul - 2024 Jan:

Development of internal products. The main activity is related to cryptography and cryptographic attacks on modern protocols.

Assistance 2024 Sep -Present:

Assistant on the Algorithm course in MIPT. I am involved in checking students' code and helping the seminar teacher in organizing seminars.

${f Assistance}$ 2024 Jan - 2024 Jun:

Assistant on the programming technology course in MIPT. During the work, I have been checking the practical tasks of junior year students in Bash, Git, Docker, CI-CD and etc., and also brought to fruition the students' projects.

PROJECTS & COMPETITIONS

Finalist of the case championship from "Yakov and Partners" | Financial analysis, MS Office Link to the Materials

2025

- Led the team as Captain, developing strategic financial models for consulting industry applications
- Built financial models to assess investment strategies, using MS Office for reporting and presentations
- Managed team activities and ensured clear communication and alignment with project objectives

Participant of the Moscow State University conference in the field of econometrics | LaTeX, Python Link to the Materials

2025

- Presented a report at the prestigious Moscow State University conference in the "Innovative Econometrics" section
- · Applied advanced statistical and econometric techniques to present cutting-edge research and solutions
- Demonstrated strong skills in data analysis, econometric modeling, and effective communication of complex concepts

Participant of NES Investment Research Challenge | MS Office, WACC/DCF Link to the Materials

2025

- - Conducted a comprehensive market analysis of the Russian pharmaceutical industry, focusing on the pharmaceutical company PROMOMED
 - Performed financial analysis using WACC and DCF methods to assess the company's valuation and investment potential

Financial econometrics: garch volatility forecasting and har-garch ensemble | Python, LaTeX Link to the Materials

2024

- Forecasting Realized Volatility in Cryptocurrency Markets Using GARCH Models
- Using Ensembling Techniques To Combine Predictions of HAR and GARCH Models

Candle simulator | Python Link to the Materials

2024

• Simple Candle Simulator: The project includes a candle simulator using real data (Dogecoin) and a trading simulator to test trading strategies.

ML algorithms and data analysis | Python

2024

Link to the Materials

• A variety of standard algorithms: Decision Tree, SGD, PCA, k-Means, k-NN, LLM, Neural Network, etc.

STL containers $\mid C++$ Link to the Materials

2023

- STL realization std::dequeue, std::unordered_map, shard_ptr etc. with iterator and allocator, move semantic
- The realization involves various memory concepts and move semantics. I used knowledge of iterator types and type_traits

Earley algorithm and LR(1)- algorithm | C++, Git, Bash, CMakeLink to the Materials

2023

• Algorithm for parsing context free grammar