Roman Shaibaneev

Quantitative and data analyst

Prague, Czech Republic shaibroman@gmail.com 777 836 260 shaibroman

Education

MA **CERGE-EI**, joint institution of Charles University and Czech Academy of Science, *Quantitative economics* — 2023 to 2025

- (Czech) Average: 1.0/1.0
- Thesis: Multivariate analysis of transactional data. Supervisor: **Stanislav Anatolyev (NES/CERGE-EI)**
- Completed master's-level courses in Statistics and Stochastic Analysis from the Mathematical faculty of Charles university (MFF UK), constituting the equivalent of a minor in the field
- Member of an econometric research group at CERGE-EI
- **Coursework:** Micro/Macro theory, Econometrics/Time Series, Stochastic Analysis/Random Processes, Machine Learning (NPFL129)

Ing Stopped after 1 semester**, Prague University of Economics and Business (VŠE)**, *Econometrics and Operations Research* — 2023 to 2024

- Studied the program during the first semester at CERGE-EI. Left it because decided to rather concentrate on additional MFF UK subjects listed above
- **Coursework:** Risk Management, Discrete Optimization in Python

B.c. **Prague University of Economics and Business (VŠE)**, *Econometrics and Operations Research* — 2020 to 2023

- **Graduated with honors**, among the top three students
- Thesis: Econometric analysis of the relationship between vaccination against COVID-19 and its occurrence in the population. Supervisor: **Vladimír Holý (VŠE)**
- **Coursework:** Econometrics/Statistics, Optimization, Financial Math/Derivatives, Accounting/Law ...

Experience

Skillspire, Machine learning and AI tutor — **Remote**, Seattle, USA, Apr 2025 to Aug 2025

- I have been a teaching assistant for the course. I have devoted 18+ hours a week to teaching machine learning algorithms and continuously refining the curriculum

Česká spořitelna, Credit risk analyst — Prague, Czech Republic, Aug 2022 to Jan 2023

- Validation and monitoring of bank models team
- I was primarily responsible for monitoring corporate credit risk models. I also conducted smaller validations of other models

Tutor — 2020 to 2024

- I worked as a tutor for high school and university (mostly VŠE) students. Main subjects: Math, Economics, and Statistics

Projects

Below are projects I undertook on my own, at work, and at universities. I have been busy and productive with my Master's studies and econometrics research since 2022.

Projection of personal budget

- A simple code that projects my personal monthly budget with (predefined) dynamics of spendings, earnings and interest rates. Within 2025 I am planning to create a database of my spendings and to use it for better (not predefined) projection

Validation of a VaR simulation model 2022

- I validated a simulation code of VaR written in SAS. I took the theoretical framework of the model and wrote an independent code in R which yielded similar results, and I located some errors in the original SAS code. With the help of a colleague, we were able to optimize my code

Monitoring of corporate models 2022

- Conducted a regular third quarter monitoring of mostly corporate scoring models in SAS

Validation of a real estate repricing model 2022

- Helped to prepare data for the validation of the model

Modeling of credit risk, EY 2022

- Joint course with EY finished with a team project. We applied logistic regression to binned variables to estimate PD (probability of default) and validated the model

Modeling of credit risk 2022

- Created a model for the project to estimate PD (probability of default). Was more quantitative with different data and I applied additional techniques for modeling

Analysis of retail data 2022

- Divided customers into various groups and understand their demand behavior. For the first part, I used multinomial logistic regression, and for the second, I used goal programming.

Forecasting of births 2023

- Applied the cohort-component method to project people during their reproductive age up to the next 5 years, combined with fertility rates forecast by Lasso regression to predict newborns

Bayesian analysis of real estate 2022

- Applied Bayesian regression with predefined priors on Kaggle real estate data from Taiwan and estimated it with the Gibbs sampler

Skills and Technologies

Programming: Python, R, MATLAB

Technologies: Excel, SQL, smaller technologies including eviews, lingo, mpl, git, azure and more

Languages: Russian, English, Czech (all C1+)