Stanislav Khrapov

Contact Information

Ossietzkystraße 6
Frankfurt am Main, Germany
Phone: +49 159 0117 9221

Email: khrapovs@gmail.com
Web: khrapovs.github.io

Personal Statement

Stanislav Khrapov is a full stack Data Scientist with several years of experience in agile environment, advanced academic background, as well as strong technical and communication skills.

Professional Experience

DB Schenker, Frankfurt am Main, Germany

Data Scientist **April 2018 – present**

- Designed and implemented custom time series models for forecasting of market freight prices and volumes, company internal financial indicators (EBIT, revenue, receivables, payables, etc.) to facilitate data-driven pricing decisions and liquidity planning.
- Designed and implemented recommendation system to digitize and automate ground trasportation auctions in the carrier-dispatcher communication platform.
- End-to-end ML cycle including data ingestion, processing, training, forecasting, evaluation, monitoring, orchestration, and delivery software.
- Wrote software packages for automated model evaluation, comparison, and reporting.
- Produced sophisticated static (Matplotlib, Seaborn) and dynamic (Dash, Bokeh) visualizations for presentation to internal business clients.
- Worked in agile environment as a lead data scientist, scrum master, and product owner. Coordinated work of data scientists, data engineers, DevOps, business consultunts. Mentored trainees and junior team members.
- Designed and performed comprehensive company-wide workshops and multi-day trainings on machine learning for audiences of up to 150 people across diverce departments, both online and offline, with topics ranging from basics up to advanced hands-on instruction.

New Economic School, Moscow, Russia

Assistant Professor of Finance **Sep 2011 – Aug 2018**

- Research: Conducted research independently as well as with co-authors in the fields of financial econometrics, option pricing, volatility modelling.
  Searched and surveyed all relevant literature on the subject. Collected, cleaned, and analyzed complex data from such sources as OptionMetrics, CRSP, TAQ, Compustat, Quandl. Collected unstructured data using web parsing methods and regular expressions. Performed Monte Carlo experiments for model selection purposes.
  Advanced knowledge of parametric and non-parametric estimation methods of non-linear models including MLE, GMM. Implemented several models and estimation methods as Python modules publicly available from GitHub repository.
  Presented at major international economics, finance, and econometrics conferences.
- Teaching: Intermediate Econometrics, Advanced Econometrics, Financial Econometrics, Data Analysis in Python. 10–50 students in each class.
- Supervision: 4–8 master and bachelor students each year.

SAS Institute, Cary, NC, USA

Summer intern **May 2007 – Aug 2010**

Programmed C module for estimation of GEE type models
Wrote examples of usage of new Copula procedure
Participated in writing of future publication "SAS/ETS User's Guide"
Added examples of usage and edited manuals for SAS/ETS procedures

University of North Carolina, Chapel Hill, NC, USA

Teaching/Research assistant **Aug 2007 – May 2011**

Teaching: Recitations in graduate classes: Intro to Probability Theory, Applied Econometrics, Advanced Econometrics.

Oregon State University, Corvallis, OR, USA

Teaching assistant **Sep 2004 – Jul 2006**

Teaching: Graduate econometrics recitations. Graded undergraduate courses in economics.

United Nations, New York, NY, USA

Summer intern **Jun 2005 – Sep 2005**

Improved annual statistical report on contributions and expenditures of member countries.

Education

University of North Carolina, Chapel Hill, NC, USA

PhD in Economics (major in Financial Econometrics) **Sep 2006 – Jun 2011**

Oregon State University, Corvallis, OR, USA

MA in Economics (major in Econometrics) **Sep 2004 – Jun 2006**

Novosibirsk State University, Novosibirsk, Russia

BA, MA in Economics **Sep 1998 – Jun 2004**

Skills

Operating systems: Linux, Windows
Programming languages: proficient in Python; basics of SQL, R, SAS, C/C++
Visualization: Dash, Bokeh, Matplotlib, Seaborn
Orchestration: Airflow, Pachyderm, Argo
Monitoring: ELK stack
ML software: Dask, SciKit, DVC, Docker
Web: Flask, FastAPI, SOAP
Cloud platforms: AWS, Azure
Git: GitLab, GitHub
Languages: Russian (native), English (fluent), German (B2)

Research

Hyojin Hana, Stanislav Khrapov, Eric Renault (2020). *The leverage effect puzzle revisited: Identification in discrete time*. Journal of Econometrics

Stanislav Anatolyev and Stanislav Khrapov (2015). *Right on Target, or Is it? The Role of Distributional Shape in Variance Targeting*. Econometrics, 3(3), pp. 610—632

Buy Global, Sell Local. Consumption Heterogeneity, Regional Risk-sharing, and the Cross-section of Equity Returns *(with Riccardo Colacito)*

Option Pricing via Risk-Neutral Density Forecasting *(working paper)*

Pricing Central Tendency in Volatility *(working paper)*

Do Spatial Structures Yield Better Volatility Forecasts?
(working paper, with Stanislav Anatolyev)

Realized Skewness Predicts Jump Variation *(working paper, with Elena Buchatskaya)*

Risk Premia: Short and Long-term *(working paper)*

Modeling Vast Dimensional Autoregressive Conditional Density
(work in progress, with Stanislav Anatolyev and Andrey Zeleneev)

PRESENTATIONS

2017: *Vienna-Copenhagen Financial Econometrics Conference (Vienna, Austria), 4th ESSEC Empirical Finance Workshop (Cergy, France).* ***2016:*** *Annual Congress of the European Economic Association and Econometric Society European Meetings (Geneva, Switzerland), 23rd International Conference "Forecasting Financial Markets" (Hanover, Germany).* ***2015:*** *2nd International Workshop on "Financial Markets and Nonlinear Dynamics" (Paris, France), 23rd Symposium of the Society for Nonlinear Dynamics and Econometrics (Oslo, Norway).* ***2014:*** *International conference "Modern econometric tools and applications" (Nizhniy Novgorod, Russia), 8th International Conference on Computational and Financial Econometrics (Pisa, Italy).* ***2013:*** *Humboldt-Copenhagen Financial Econometrics Conference (Berlin, Germany), Econometric Society European Meeting (Goteborg, Sweden), International Moscow Finance Conference (Moscow, Russia).* ***2012:*** *Financial Management Association European Conference (Istanbul, Turkey), Society for Financial Econometrics (Oxford, Great Britain), Econometric Society European Meeting (Malaga, Spain), Financial Management Association Annual Meeting (Atlanta, USA), Econometric Society Asian Meeting (Delhi, India).* ***2011:*** *Higher School of Economics (Moscow, Russia), Midwest Econometrics Group (Chicago, USA)*