Martin Stancsics

Education

2019–	**PhD in Economics**, *Universität Zürich*
2014–2016	**MA in Economics**, *Central European University*, Budapest GPA: 3.98/4
2012–2016	**Member**, *Heller Farkas College of Advanced Financial Studies*
Spring 2014	**Exchange semester**, *University of Amsterdam* Erasmus grant
2011–2014	**BSs in Economics**, *Corvinus University of Budapest*, Economic and Financial Mathematical Analysis GPA: 4.68/5

Extracurricular activities

2014–2015	**Chief Learning Officer**, *Heller Farkas College of Advanced Financial Studies* Responsible for the organization and supervision of courses and other academic activities.
2013	**Coordinator**, *Heller Farkas Conference*, (Heller Farkas Szakmai Hét) Topic: monetary policy

Working experience

2024–	**Data scientist**, *Quantco*, Zürich Working on Quantco's next generation insurance pricing platform.
2023	**Data science intern**, *Quantco*, Zürich Worked on improving Quantco's open source Python package for estimating generalized linear models (glum). Added a formula interface, flexible Wald tests, and other quality-of-life features. Refactored the package serving as its backend (tabmat) to have a more consistent interface. My work during this internship forms the basis of the glum v3 and tabmat v4 releases.
2018–2019	**Analyst**, *National Bank of Hungary*, Directorate Financial Analysis Constructed an IFRS9-compliant model of credit risk for the stress-test of the financial system. Estimated a disequilibrium model of financial constraints. Worked on modeling the effect of EU subsidies on financial constraints.
2016–2018	**Junior analyst**, *National Bank of Hungary*, Directorate Financial Analysis Estimated the efficacy and effectiveness of EU subsidies. Estimated and ran satellite models for the stress-test of the financial system.
Summers of 2014, 2015	**Intern**, *National Bank of Hungary*, Directorate Financial Analysis Enhanced a survival model for the probability of default of residential loans with estimate for loan recovery.

32 Zwickystrasse – Wallisellen 8304 – Switzerland
+41 78 406 9377 • *martin.stancsics@gmail.com*
stanmart.github.io • *stanmart* • *stanmart*   *1/4*

Teaching

2022–2023	**Programming Practices for Research Students (PhD)**, *Lecturer*, Universität Zürich, Department of Economics
2021	**Programming Practices for Research Students (PhD)**, *Teaching Assistant*, Universität Zürich, Department of Economics
2021	**Advanced Microeconomics II (MA)**, *Teaching Assistant*, Universität Zürich, Department of Economics
2020	**Behavioral Finance (BA)**, *Teaching Assistant*, Universität Zürich
2016–2018	**Scientific Python**, *Lecturer*, Heller Farkas College of Advanced Financial Studies
2017–2018	**Overview of Macroeconomics**, *Lecturer*, Heller Farkas College of Advanced Financial Studies
2015	**Introduction to MATLAB**, *Lecturer*, Heller Farkas College of Advanced Financial Studies
2012–2013	**Analysis I–II, Algebra I–II (BSc)**, *Teaching Assistant*, Corvinus University of Budapest, Department of Mathematics

Publications

2021	Credit constrained firms and government subsidies: evidence from a European Union program, *with Eszter Balogh, Adám Banai, Tirupam Goel, Péter Lang, Előd Takáts, Álmos Telegdy* BIS Working Papers 984 / MNB Working Papers 2021/5
2020	Unfolding the hidden structure of the Hungarian multi-layer firm network, *with András Borsos* MNB Occasional Papers 139
2020	Waste of money or growth opportunity: The causal effect of EU subsidies on Hungarian SMEs, *with Ádám Banai, Péter Lang, Gábor Nagy* Economic Systems vol. 44 (1), 100742
2017	Impact evaluation of EU subsidies for economic development on the Hungarian SME sector (Hungarian), *with Ádám Banai, Péter Lang, Gábor Nagy* Economic Review – monthly of the Hungarian Academy of Sciences vol. 64(10) pp. 997–1029
2017	Impact evaluation of EU subsidies for economic development on the Hungarian SME sector, *with Ádám Banai, Péter Lang, Gábor Nagy* MNB Working Papers 2017/8
2016	Interest rates and asset distributions of naive hyperbolic discounters Central European University MA Thesis
2015	China: from a planned economy to a modern banking system (Hungarian), *with Laura Komlóssy, Zsolt Kovalszky, Gyöngyi Körmendi, Péter Lang* Financial and Economic Review vol. 14(5) pp. 133–144
2014	Belief-based equilibrium selection in signaling games (Hungarian) Corvinus University of Budapest BSc Thesis

Conferences

2023	Hybrid platforms and bargaining
	Swiss IO day
2018	Identifying credit-constrained firms using a disequilibrium model
	Financial Stability Christmas Seminar
2018	Visualizing public transport using Python
	Budapest BI Forum
2017	Estimating the effect of EU subsidies on Hungarian SMEs
	Financial Stability Christmas Seminar

Computer skills

Languages	Python, R, Stata, Matlab, SQL (basics), Rust (basics), Haskell (basics)
Markup and rel.	Latex, Markdown, Quarto, Jupyter, HTML, CSS (basics)
Data tools	dplyr, data.table, pandas, sqlite
Econometrics	base R, lfe, statsmodels
Data viz	ggplot2, matplotlib, seaborn, altair, vega-lite, bokeh, datashader
ML and NLP	sklearn, keras (basics), nltk, spacy (basics), gensim (basics)
Workflow	Git, Snakemake, conda, virtualenv, Renv (basics), Docker
Webscraping	requests, selenium, beautifulsoup4
Command line	bash, powershell (basics), cmd (basics), ssh
Web dev	flask (basics), jekyll, nginx (basics)

Awards and Scholarships

2019	UBS Center Scholarship
	Universität Zürich
2016	Outstanding Academic Achievement Award
	Central European University
2016	Outstanding MA Thesis Award
	Central European University
2015	Peter Hangartner Fellowship
	Central European University
2014	Department's Award for Outstanding Achievement
	Corvinus University of Budapest

Selected courses

Universität Zürich	Field Experiments, Behavioral Economics, Neuroeconomic Foundations of Decision Making
ETH Zurich	Data Science for Judicial Decision-Making, NLP for Law and Political Economy
Central European University	Industrial Organization, Network Science, Agent-based Models, Empirical Industrial Organization
University of Crete	Econometrics of Duration Data with Macroeconomic Applications Advanced Summer School in Economics and Econometrics
Technical University of Madrid (UPM)	Bayesian Inference, Support Vector Machines and Regularized Learning Advanced Statistics and Data Mining Summer School

Languages

Mother tongue	Hungarian
Full professional	English
Basic	German

Research interests

- Industrial organization
- Behavioral economics
- Machine learning

- Cooperative game theory
- Unstructured bargaining
- Natural Language Processing