

Curriculum Vitae

Olga Kuryatnikova
kuryatnikova@gmail.com

Academic work experience

- Oct 2020 – present **Assistant professor**, Erasmus University Rotterdam
Erasmus School of Economics, Department of Econometrics
Specialization: operations research, conic optimization
- Oct 2019 – Oct 2020 **Postdoctoral fellow**, Ivey Business School
Specialization: applications of polynomial programming
in energy network optimization
- Sep 2015 – May 2019 **Teaching assistant**, Tilburg University
TiSEM, Department of Econometrics & Operations Research

Industrial work experience

- Apr 2014 – July 2014 **Intern in the department of finance & control**, Sociale Verzekeringsbank
(the institution that implements national insurance schemes in the Netherlands)
– Built an econometric model of the demand for social assistance for retirees
- June 2011 – Aug 2013 **Expert in the department of corporate ratings**, Expert RA
(a rating agency in Russia)
– Developed rating methodologies and conducted rating analysis for pension
funds, industrial companies and sovereign issuers
– Prepared analytical surveys about Russian pension market and country risks

Education

- Sep 2015 – Sep 2019 **PhD in Operations Research**, Tilburg University
Thesis: “The many faces of positivity to approximate structured
optimization problems”
Supervisor: R. Sotirov, J.C. Vera, L.F. Zuluaga
- Aug 2013 – Aug 2015 **Research Master in Operations Research**, Tilburg University (cum laude)
- Aug 2010 – May 2012 **Master in Economics**, Higher School of Economics
- Sep 2006 – June 2010 **Bachelor in Economics**, Lomonosov Moscow State University (cum laude)

Research

Publications

- O. Kuryatnikova, R. Sotirov and J. C. Vera. The maximum k -colorable subgraph problem and related problems. ArXiv preprint 2001.09644, 2020
Accepted in SIAM Journal on Computing.
- O. Kuryatnikova and J. C. Vera. New bounds for truthful scheduling on two unrelated selfish machines. Theory of Computing Systems, 64: 199–226, 2020.
- O. Kuryatnikova and J. C. Vera. Approximating the cone of copositive kernels to estimate the stability number of infinite graphs. Electronic Notes in Discrete Mathematics, 62: 303–308, 2017. LAGOS’17 – IX Latin and American Algorithms, Graphs and Optimization.

Submissions

- B. Ghaddar, O. Kuryatnikova and D. K. Molzahn. Adjustable Robust Two-Stage Polynomial Optimization with Application to AC Optimal Power Flow. ArXiv preprint 2104.03107, 2021
Submitted.
- O. Kuryatnikova, J. C. Vera and L.F. Zuluaga. The copositive way to obtain certificates of non-negativity over general semialgebraic sets. ArXiv preprint 1909.06689, 2019
Revise and resubmit. Mathematical Programming.
- O. Kuryatnikova and J. C. Vera. Positive semidefinite approximations to the cone of copositive kernels. ArXiv preprint 1812.00274, 2018
Revise and resubmit. Mathematical Programming.

Work in progress

- O. Kuryatnikova and J. C. Vera. Generalizations of Schoenberg's theorem on positive definite kernels. ArXiv preprint 1904.02538, 2019
We are considering a generalization of the result in this preprint
- B. Ghaddar, H. Hu, O. Kuryatnikova and H. Wolkowicz. Alternating direction method of multipliers for ACOPF.

Teaching

Oct 2021 – Dec 2021 (forthcoming)	Optimization under Uncertainty, Erasmus University Rotterdam level: master role: lecturer
May 2021 – July 2021	Linear Programming, Erasmus University Rotterdam level: bachelor role: lecturer
Sep 2018 – Jan 2019 Sep 2017 – Jan 2018	Optimization, Tilburg University level: master role: teaching assistant and lecturer
Aug 2018 – Oct 2018 Aug 2017 – Oct 2017 Sep 2016 – Dec 2016	Decision making with Business Analytics, Tilburg University level: master role: teaching assistant
Sep 2017 – Jan 2018 Sep 2016 – Jan 2017 Feb 2016 – May 2016	Statistics 1 and 2, Tilburg University level: bachelor role: teaching assistant
Sep 2015 – Jan 2016	Mathematics 1, Tilburg University level: bachelor role: teaching assistant

PC skills

- Programming languages: MATLAB, R, Python, SQL
- Statistical software: Stata, SPSS
- Miscellaneous: LaTeX, Ms Office, Jupyter Notebook

Conferences and workshops

July 2021	SIAM Conference on Optimization (OP21) (speaker)
May 2021	IISE Annual Conference & Expo Presentation (speaker)
October 2020	Data Fest Moscow 2020 (speaker)
January 2020	Workshop on Smart Cities Optimization (participant)
July 2018	ISMP, International congress of mathematical optimization (speaker)
October 2017	Oberwolfach Workshop 1744b on Copositivity and Complete Positivity (speaker)
October 2017	LAGOS, IX Algorithms, Graphs and Optimization Symposium (speaker)
July 2017	IFORS, Conference of the international federation of operational research societies (speaker)
July 2017	EUROPT Workshop on Advances in Continuous Optimization (speaker)
August 2019, August 2016	ICCOPT, International conference on continuous optimization (speaker)

Visits

May – June 2018	Lehigh University; host: Luis F. Zuluaga
April 2018	Delft University of Technology; host: Fernando M. de Oliveira Filho
March 2018	Trier University; host: Mirjam Dür

Other

- Refereeing: Journal of Global Optimization, SN Operations Research Forum
- Conference session organizing: ISMP 2018, “Copositive and completely positive optimization”
- Languages: Russian – native, English – fluent, Dutch – intermediate, German – basic
- Citizenship and work permit: Russia