Curriculum Vitae

Olga Kuryatnikova
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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 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

- O. Kuryatnikova, R. Sotirov and J. C. Vera. The maximum k-colorable subgraph problem and related problems. ArXiv preprint 2001.09644, 2020
  Revise and resubmit. SIAM Journal on Computing.

- 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, O. Kuryatnikova and D. K. Molzahn. Robust ACOPF using polynomial optimization.

- B. Ghaddar, H. Hu, O. Kuryatnikova and H. Wolkowicz. Alternating direction method of multipliers for ACOPF.

Teaching

Expected: 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

October 2020	**Data Fest Moscow 2020** On-line; invited speaker
January 2020	**Workshop on Smart Cities Optimization** Toronto, Canada; participant
August 2019	**ICCOPT, International conference on continuous optimization** Berlin, Germany; invited speaker
July 2018	**ISMP, International congress of mathematical optimization** Bordeaux, France; invited speaker
October 2017	**Oberwolfach Workshop 1744b on Copositivity and Complete Positivity** Oberwolfach, Germany; invited speaker
October 2017	**LAGOS, IX Algorithms, Graphs and Optimization Symposium** Marseille, France; invited speaker
July 2017	**IFORS, Conference of the international federation of operational research societies** Quebec City, Canada; invited speaker
July 2017	**EUROPT Workshop on Advances in Continuous Optimization.** Montréal, Canada; invited speaker
August 2016	**ICCOPT, International conference on continuous optimization** Tokyo, Japan; invited 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

References

- dr. Daniel Molzahn, the Georgia Institute of Technology, molzahn@gatech.edu, +1 404 894 1876. Relationship: coauthor.
- dr. Juan C. Vera Lizcano, Tilburg University, j.c.veralizcano@uvt.nl, +31 134 662 478. Relationship: PhD supervisor, coauthor.
- prof. dr. Henry Wolkowicz, University of Waterloo, hwolkowi@uwaterloo.ca, +1 519 888 4567. Relationship: coauthor.
- dr. Luis F. Zuluaga, Lehigh University, luis.zuluaga@lehigh.edu, +1 610 758 5182. Relationship: PhD co-supervisor, coauthor.