Mohammad Ansarin

Academic Curriculum Vitae

Education

2015 – 2021	**PhD in Management**, Rotterdam School of Management, Erasmus University, Rotterdam, Netherlands Thesis: The Economic Consequences of Electricity Pricing in the Renewable Energy Era
2013 – 2015	**MSc in Biomedical Sciences and Engineering**, Koc University, Istanbul, Turkey
2008 – 2012	**BSc in Mechanical Engineering**, Sharif University of Technology, Tehran, Iran

Experience

7/2022 – present	**Consultant**, Trinomics, Rotterdam, Netherlands Research on various energy-related subjects for primarily public-sector clients
4/2022 – 12/2022	**Research Associate**, Interdisciplinary Center for Security, Trust, and Reliability, University of Luxembourg, Luxembourg Managing, coordinating, and providing analysis for multiple research projects in energy systems and climate topics. Details below in *Research Projects*
4/2021 – 3/2022	**Post-doctoral Researcher**, Rotterdam School of Management, Erasmus University, Rotterdam, Netherlands Researcher for "**Flex**ibility in **S**mart **U**rban Energy **S**ystems" project. Details below in *Research Projects*
2015 – 2021	**PhD Candidate**, Rotterdam School of Management, Erasmus University, Rotterdam, Netherlands Research projects at the intersection of management, economics, and energy systems. Details in *Research Projects* Lecturer, coordinator, and/or assistant for multiple courses and MSc thesis supervision. Details in *Teaching* Faculty Council representative (September 2017 - August 2019); Vice-Chair (September 2019 - August 2021)
2013 – 2015	**Research and Teaching Assistant**, Graduate School of Sciences and Engineering, Koc University, Istanbul, Turkey Details in *Research Projects* and *Teaching*
Summer 2012 (2 months)	**Internship**, Rahbord Danesh Pooya Institute, Tehran, Iran Rahbord Danesh Pooya is an engineering consulting firm based in Tehran, Iran, which focuses on optimizing efficiency in large-scale industrial projects across Iran. More at: rdpi.ir/en
Summer 2011 (2 months)	**Internship**, Biofluid Engineering Lab, Mechanical Engineering Department, Sharif University of Technology, Tehran, Iran Designed a peristaltic pump for bioreactor fluids, with focus on minimizing turbulent flow and pressure gradients within fluid.

Research Projects

(reverse chronological order)

6/2022 – 12/2022 **Forecasting intraday electricity market prices**, *with partners from Enovos, the main Luxembourgish energy retailer*

Project develops datasets and machine learning algorithms to improve Enovos's trade in European intraday power markets.

6/2022 – 12/2022 **A study on physical risks and threats for Luxembourgish economy until 2050**, *Consortium project for the Luxembourgish Ministry of the Economy*

Our contribution was on resource scarcity and climate change threats for the energy infrastructure supporting Luxembourgish industry, with a qualitative analysis based on expert interviews and desk research.

5/2022 – 12/2022 **Flexibility potential and user behavioral analysis**, *with Creos, the Luxembourgish electricity grid operator, and the Luxembourg Institute of Science and Technology*

This project studies the flexibility potential in Luxembourg and develops options for Creos to activate this flexibility.

4/2022 – 12/2022 **Incentivized charging scheduling for electric vehicles**, *with Enovos, the main Luxembourgish energy retailer, and University of Luxembourg's Security Design and Validation group*

This project researches smart charging potential for EVs in Luxembourg, with demo applications created with optimized smart charging back-end based on behavioral analysis of EV owners.

3/2021 – 3/2022 **Flexibility for Smart Urban Energy Systems**, *with Yashar Ghiassi-Farrokhfal and partners from Technical University of Denmark, Chalmers University of Technology, Linkoping University, and the municipalities of Lyngby-Taerbek and Holbaek (Denmark)*

FlexSUS is a collaboration between universities and municipalities on developing sustainable and long-term urban heating solutions. I work on designing scenarios for future urban heating development, and on the economics of retail pricing for urban heating systems. Details at `https://flexsus.org/`.

Working papers

1. **The Equity of Residential Energy Pricing with Heat Pumps and Electric Vehicles**

Older projects

2016 – 2021 **PhD Thesis: The Economic Consequences of Electricity Pricing in the Renewable Energy Era**, *Supervisors: Wolfgang Ketter and Yashar Ghiassi-Farrokhfal; also with John Collins*

The thesis focuses on the effects of metering and tariff design on equity and economic efficiency, especially in high-renewables scenarios. This research was presented at International Conference on Applied Energy 2019 and 2020, IAEE 2018, 2019, and 2021, and the Workshop on Information Technology and Systems 2016 and 2017.

2019 – 2020 **Temporal city-scale matching of solar photovoltaic generation and electric vehicle charging**, *with Ulrich Fretzen and Tobias Brandt*

2015 – 2019 **The Power Trading Agent Competition**, *with Wolfgang Ketter, John Collins, and Yashar Ghiassi-Farrokhfal*

Power TAC is a competitive simulation of the electricity supply chain. The platform's dynamic agent-based modeling clarifies the results of various changes in the electricity grid. We evaluated policy decisions in balancing and wholesale markets by clarifying their potential consequences. This research was presented at IEEE Innovative Smart Grids Conference Europe 2016 (`doi.org/10.1109/ISGTEurope.2016.7856197`), IJCAI 2016 AMEC-TADA Workshop, and Energy Informatics and Management Conference 2016. More info at `powertac.org`.

2014 – 2015 **European Meteorology Research Programme: Dynamic Mechanical Properties and Long term Deformation Behaviour of Viscous Materials (MeProVisc)**, *EURAMET*

MeProVisc was a joint research program aimed at developing novel measurement standards for viscoelastic materials (e.g. rubbers). Our contribution was testing viscoelastics and comparing results between testing methods. More info at: `http://projects.npl.co.uk/meprovisc/`.

2013 – 2015 **MSc Thesis: A Comparison of Nanoindentation and Mesoscale Measurements on Polychloroprene Rubber**, Graduate School of Sciences and Engineering, Koc University, Istanbul, Turkey

Research involved modeling and testing viscoelastic materials (e.g. rubbers, silicone, liver tissue), viscoelasticity measurement instruments designs, and computational considerations.

2012 **BSc Thesis: Design of a Reciprocating Gait Orthosis**, Mechanical Engineering Department, Sharif University of Technology, Tehran, Iran

Teaching

2015 – 2021 **Teaching Assistant/Lecturer**, Rotterdam School of Management, Erasmus University, Rotterdam, Netherlands

Lecturer, coordinator, and/or teaching assistant for
- Intelligent and Integrated Energy Systems online course, from Technical University of Delft (on EdX in early 2022)
- Next Generation Business Applications (2 years), an RSM Business Information Management MSc elective course
- Designing Business Applications (4 years), an RSM Business Information Management MSc core course
- Energy Analytics for Sustainability (1 year), an RSM MBA course.

2015 – 2021 **Thesis coach/co-reader**, Rotterdam School of Management, Erasmus University, Rotterdam, Netherlands

Supervision of over 70 MSc research theses on a range of topics. Theses are on `https://thesis.eur.nl/`.

2013 – 2015 **Teaching Assistant**, Graduate School of Sciences and Engineering, Koc University, Istanbul, Turkey

Assisted two courses from the BSc in Mechanical Engineering program:
- Dynamic Modeling and Control (3 semesters, Instructor: Cagatay Basdogan).
- Machine Design (2 semesters, Instructors: Halit Turkmen, Kerem Pekkan) courses

2009 – 2010 **Teaching Assistant**, Language Department, Sharif University of Technology, Tehran, Iran

Assistant to Minoo Alemi in the General English course (2 semesters); focus on essay writing.

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I also regularly review articles for academic journals (Energy Policy, The Energy Journal, Business and Information Systems Engineering, Utilities Policy, Energy Efficiency) and conferences (IEEE ISGT, AAMAS, ICIS, HICSS, ECIS, ICAE, ACM e-Energy).

Academic Journal Publications

Google Scholar Profile (h-index: 4); ORCID: 0000-0001-7170-7984

2022 **A Review of Equity in Electricity Tariffs in the Renewable Energy Era**, *Ansarin, M., Ghiassi-Farrokhfal, Y., Ketter, W., Collins, J.,* Renewable and Sustainable Energy Reviews, 161; `https://doi.org/10.1016/j.rser.2022.112333`

2022 **Economic Inefficiencies of Pricing Distributed Generation under Novel Tariff Designs**, *Ansarin, M., Ghiassi-Farrokhfal, Y., Ketter, W., Collins, J.,* Applied Energy, 313; `https://doi.org/10.1016/j.apenergy.2022.118839`

2021 **Temporal city-scale matching of solar photovoltaic generation and electric vehicle charging**, *Fretzen, U., Ansarin, M., Brandt, T.,,* Applied Energy, 282; `https://doi.org/10.1016/j.apenergy.2020.116160`

2020 **Cross-subsidies among residential prosumers from tariff design and metering infrastructure**, *Ansarin, M., Ghiassi-Farrokhfal, Y., Ketter, W., Collins, J.,* Energy Policy, 145; `https://doi.org/10.1016/j.enpol.2020.111736`

2020 **The economic consequences of electricity tariff design in a renewable energy era**, *Ansarin, M., Ghiassi-Farrokhfal, Y., Ketter, W., Collins, J.,* Applied Energy, 275; `doi.org/10.1016/j.apenergy.2020.115317`

2016 **Effect of pre-heating on the mechanical properties of silorane-based and methacrylate-based composites**, *Mohammadi, N., Jafari-Navimipour, E., Kimyai S., Ajami A., Bahari, M., Ansarin, M., Ansarin, M.,* Journal of Clinical and Experimental Dentistry, 8,4; `doi.org/10.4317/jced.52807`

Other Publications

2020 **Going Greener and Smarter: The Energy Transition at the Port of Rotterdam's Industrial Complex**, *Nikolopoulou, K., Van Koert, M., Ghiassi-Farrokhfal, Y., Ansarin, M.,* RSM Case Development Centre, `https://www.thecasecentre.org/educators/products/view?&id=176396`

2020 **On the Fairness Debate Surrounding Electricity Tariff Design in the Renewable Energy Era**, *Mohammad Ansarin*, IAEE Energy Forum, 3; `https://www.iaee.org/documents/2020EnergyForum3qtr.pdf`

Grants and Awards

1/2014 **Graduate Student Full Scholarship**, *Koc University*, Istanbul, Turkey

2/2013 **TUBITAK Project Scholarship**, *Science and Technological Research Council of Turkey* Grant Code: 110M469

Test Scores and Certificates

2016 **Cambridge CPE**, *Grade A*

2014 **GMAT**, *770*, 99th percentile, Analytical Writing: 5.0

2014 **TOEFL iBT**, *116*

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2011	**GRE General**, *160 Verbal, 168 Quantitative, 4.0 Analytical Writing*, Percentiles: 84th, 95th, 56th
2008	**Iran's National Undergraduate Entrance Exam in Science and Engineering**, *127th, 99.9th percentile (400k+ participants)*
2008	**Iran's National Undergraduate Entrance Exam in Language Studies**, *3rd, 99.9th percentile (300k+ participants)*

Computer skills/languages

Advanced	R, Microsoft Office, Matlab
Proficient	LaTeX, C++, Solidworks
Beginner	Python, Linux, SPSS, AutoCAD, FLUENT, Fortran

Human languages

Native	English, Farsi
Proficient	Turkish, Azeri
Beginner	Dutch, Arabic

References

Website	**Wolfgang Ketter**, *Chaired Professor of Information Systems; Faculty of Management, Economics, and Social Sciences, University of Cologne, Cologne, Germany*, +49 221 470 5325, ketter@wiso.uni-koeln.de
Website	**Yashar Ghiassi-Farrokhfal**, *Associate Professor, Department of Technology and Operations Management, Rotterdam School of Management, Erasmus University, Rotterdam, Netherlands*, +31 10 40 81957, y.ghiassi@rsm.nl
Website	**John Collins**, *Assistant Professor of Computer Science; University of Minnesota, Minneapolis, MN, United States*, +1 612 986 8222, jcollins@cs.umn.edu
Website	**Tobias Brandt**, *Professor, School of Business and Economics, University of Muenster, Muenster, Germany*, +49 251 83 38051, tobias.brandt@ercis.uni-muenster.de
Website	**Eric van Heck**, *Professor, Department of Technology and Operations Management, Rotterdam School of Management, Erasmus University, Rotterdam, Netherlands*, +31 10 40 82029, eheck@rsm.nl