# **Sheng Dai**

Ekonominaukio 1 02150 Espoo, Finland Aalto University School of Business ■ sheng.dai@aalto.fi

daisheng.io

**o** 0000-0001-6083-0362

#### PROFESSIONAL EXPERIENCE

Aalto University School of Business, Finland

9/2018 -

Ph.D. Candidate (supervisor: Professor Timo Kuosmanen)

Research Center of Resource and Environmental Economics, CUG, China

9/2014 - 8/2018

Research Assistant (supervisor: Professor Jinhua Cheng)

#### RESEARCH INTERESTS

Environmental and Resource Economics, Nonparametric Econometrics, Optimization, Production Economics, Applied Microeconometrics

#### **EDUCATION**

Aalto University, Finland

9/2018 -

Ph.D. in Management Science

China University of Geosciences, China

9/2014 - 6/2017

M.Sc. in Management Science

China University of Geosciences, China

9/2010 - 6/2014

B.Sc. in Business Management

## **PUBLICATIONS**

## Peer-Reviewed Journal Articles

Accepted

- [J12] Yi, J., Dai, S., Cheng, J., Wu, Q., & Liu, K. (2021). Production quota policy in China: Implications for sustainable supply capacity of critical minerals. *Resources Policy*, 72, 102046.
- [J11] Dai, S., Zhou, X., & Kuosmanen, T. (2020). Forward-looking assessment of the GHG abatement cost: Application to China. *Energy Economics*, 88, 104758. (ABS 3)
- [J10] Kuosmanen, T., Zhou, X., & Dai, S. (2020). How much climate policy has cost for OECD countries?. *World Development*, 125, 104681. (ABS 3)
- [J9] Cheng, J., Yi, J., Dai, S., & Xiong, Y. (2019). Can low-carbon city construction facilitate green growth? Evidence from China's pilot low-carbon city initiative. *Journal of Cleaner Production*, 231, 1158-1170.
- [J8] Dai, Q., Ye, X., Wei, Y. D., Ning, Y., & Dai, S. (2018). Geography, ethnicity and regional inequality in Guangxi Zhuang autonomous region, China. *Applied Spatial Analysis and Policy*, 11(3), 557-580.
- [J7] Chen, J., Cheng, J., & Dai, S. (2017). Regional eco-innovation in China: An analysis of eco-innovation levels and influencing factors. *Journal of Cleaner Production*, 153, 1-14.
- [J6] Cheng, J., Dai, S., & Ye, X. (2016). Spatiotemporal heterogeneity of industrial pollution in China. *China Economic Review*, 40, 179-191.

- [J5] Dai, S. Variable selection in convex quantile regression: L1-norm or Lo-norm regularization? Revised and Resubmitted. February. 2022
- [J4] Dai, S., Fang, Y.H., Lee, C.Y., Kuosmanen, T. pyStoNED: A Python Package for Convex Regression and Frontier Estimation. September 2021.
- [J3] Kuosmanen, T., Tan, A., Dai, S. Production function of death: Performance assessment of the English NHS hospitals during the first wave of the COVID-19 pandemic. September 2021.
- [J2] Yi J., Dai S., Cheng J., Liu K. How urban sprawl affects local and adjacent ecosystem services? Evidence from a spatial analysis of China. September 2021.
- [J1] Lehtelä J., Dai S., Kuosmanen T. Ripple Effect in the European Football Transfer Markets. October 2021.

# **Selected Work in Progress**

- [W<sub>3</sub>] Dai, S., Kuosmanen, T., Zhou, X. Non-crossing nonparametric quantile frontier estimation
- [W2] Dai, S., Kuosmanen, T., Zhou, X. Partial frontiers are not quantiles.
- [W1] Kuosmanen, T., Kuosmanen, N., Dai, S. Synergies and tradeoffs in sustainable development.

## Python package

[P1] Dai, S., Fang, Y. H., Lee, C. Y., Kuosmanen, T. A Python Package for Convex Regression and Frontier Estimation. https://github.com/ds2010/pyStoNED.

#### TEACHING EXPERIENCE

Thesis advisor and Examiner

3/2020 -

Master's Thesis, Aalto University School of Business, Finland

Teaching Assistant 1/2019 -

Econometrics (30C00200), Bachelor, Aalto University School of Business, Finland Productivity and Efficiency Analysis (30E00300), Master, Aalto University School of Business, Finland

## **GRANTS AND AWARDS**

# Research funding and grants:

Foundation for Economic Education. A sum of € 45,940 for doctoral studies and research. 2018, 2019, 2021

HSE Support Foundation. € 6,000 for doctoral studies and research.

2019

Foundation for Economic Education, A sum of € 3,100 for attending academic conferences. 2018 – 2022

HSE Support Foundation. A sum of € 4,800 for attending academic conferences.

2018 - 2022

## Awards and honours:

HSE Support Foundation. € 667 for *Recognition awards for quality publications* (total € 2,000).

Ministry of Education of the P.R.C. CNY 20,000 for *National Scholarship* for Postgraduates. 2016

Regional Science Association of China (RSAC). CNY 2,000 for Distinguished Youth Scholar Paper. 2016

Ministry of Education of the P.R.C. A sum of CNY 10,000 for *National Encouragement Scholarship* for undergraduates.

# **CONFERENCE AND SEMINAR PRESENTATIONS**

31st (hybrid) European Conference on Operation Research, Athens, Greece	06/2021
29th The Society for Risk Analysis-European conference, Espoo, Finland	06/2021
11th (virtual) North American Productivity Workshop, Miami, USA	06/2020
16th European Workshop on Efficiency and Productivity Analysis, London, UK	06/2019
42nd International Association for Energy Economics Annual Conference, Montréal, Canada	05/2019
6th International Association for Energy Economics Asian Conference, Wuhan, China	11/2018
6th World Congress of Environmental and Resource Economists, Gothenburg, Sweden	06/2018
Regional Science Association of China Annual Meeting, Changsha, China	10/2016
The Sixth Asian Seminar in Regional Science, Sendai, Japan	09/2016

# **REFEREE SERVICES**

Environmental and Resource Economics, Journal of Cleaner Production, Resources Policy, Journal of Regulatory Economics, IEEE Access, Ecosystem Health and Sustainability, Economic Analysis and Policy, Emerging Markets Finance and Trade

## **SKILLS**

Programming: R, Python, Stata, Julia, GAMS, Languages: Chinese (native), English (fluent)

#### REFERENCES

**Dr. Timo Kuosmanen** (Doctoral supervisor and co-author), Professor, Aalto University School of Business, Espoo, Finland. Email: timo.kuosmanen@aalto.fi

Dr. Jinhua Cheng (Master's supervisor and co-author), Professor and vice-president, China University of Geosciences, Wuhan, China. Email: chengjinhua100@126.com

Dr. Xun Zhou (co-author), Lecturer, University of York, York, UK. Email: xun.zhou@york.ac.uk