

# Sheng Dai

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Aalto University School of Business

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## PROFESSIONAL EXPERIENCE

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Aalto University School of Business, Finland Ph.D. Candidate (supervisor: Professor Timo Kuosmanen)	9/2018 -
Research Center of Resource and Environmental Economics, CUG, China Research Assistant (supervisor: Professor Jinhua Cheng)	9/2014 - 8/2018

## RESEARCH INTERESTS

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

## EDUCATION

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Aalto University, Finland Ph.D. in Management Science	9/2018 -
China University of Geosciences, China M.Sc. in Management Science	9/2014 - 6/2017
China University of Geosciences, China B.Sc. in Business Management	9/2010 - 6/2014

## PUBLICATIONS

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### 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.

## Submitted

- [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

- [W3] 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

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| Thesis advisor and Examiner   | 3/2020 - |
| <i>Master's Thesis</i> , Aalto University School of Business, Finland   |          |
| Teaching Assistant  | 1/2019 - |
| <i>Econometrics (30Coo200)</i> , Bachelor, Aalto University School of Business, Finland                       |          |
| <i>Productivity and Efficiency Analysis (30Eoo300)</i> , Master, Aalto University School of Business, Finland |          |

## GRANTS AND AWARDS

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### Research funding and grants:

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| 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:

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|---|------------|
| HSE Support Foundation. € 667 for <i>Recognition awards for quality publications</i> (total € 2,000).                     | 2019       |
| Ministry of Education of the P.R.C. CNY 20,000 for <i>National Scholarship</i> for Postgraduates.                         | 2016       |
| Regional Science Association of China (RSAC). CNY 2,000 for <i>Distinguished Youth Scholar Paper</i> .                    | 2016       |
| Ministry of Education of the P.R.C. A sum of CNY 10,000 for <i>National Encouragement Scholarship</i> for undergraduates. | 2011, 2012 |

## CONFERENCE AND SEMINAR PRESENTATIONS

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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

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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

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Programming: R, Python, Stata, Julia, GAMS,  $\text{\LaTeX}$   
Languages: Chinese (native), English (fluent)

## REFERENCES

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**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