CURRICULUM VITAE

Address

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1. Personal details and the date of the CV

Name:	Dai, Sheng
ORCID:	0000-0001-6083-0362
Homepage:	daisheng.io
Date of birth:	25th October 1991
Date of the CV:	14th January 2023

2. Degrees

Ph.D. in Economics and Business Administration, Aalto University, October 2022.
M.Sc. in Management Science and Engineering, China University of Geosciences, June 2017.
B.Sc. in Business Management, China University of Geosciences, June 2014.

3. Language skills

Chinese (mother tongue), English

4. Current employment

Department of Economics, Turku School of Economics, University of Turku
 Postdoctoral researcher, 11/2022 -

5. Previous work experience

Department of Information and Service Management, Aalto University School of Business
 Doctoral researcher, 9/2018 - 10/2022.
China University of Geosciences, Research Center of Resource and Environmental Economics
 Research Assistant, 9/2014 - 8/2018.

6. Research funding and grants

Research funding

Foundation for Economic Education (Liikesivistysrahasto). 30k€ for the *postdoc project* "Synergies or Trade-offs? Reassessing Sustainable Development Goals", November 2022, Principal investigator.

Prime Minister's Office of Finland (VN TEAS). 150k€ for the project "Efficient allocation of capital and labor at the establishment, firm, and industry levels", 2021 - 2022. Primary participant.

Finnish Energy Authority (Energiavirasto). *Research project* "Kohtuullinen muuttuva kustannus sähkön jakeluverkkoyhtiöiden valvontamallissa: Ehdotus tehostamiskannustimen kehittämiseksi 6. ja 7. valvontajaksoilla vuosina 2024–2031", June - September, 2022. Primary participant.

Doctoral studies and research grants

Foundation for Economic Education (Liikesivistysrahasto). A sum of 46k€ for full-time doctoral studies and research, 2018, 2019, 2021.

HSE Support Foundation. 12k€ for full-time doctoral studies and research, 2019.

Foundation for Economic Education (Liikesivistysrahasto). A sum of 3.1k€ for attending conferences, 2019, 2020.

HSE Support Foundation. A sum of 6.4k€ for attending conferences, 2018 - 2022.

7. Research output

Bibliometric statistics

	Google scholar[1]	Scopus[2]
Number of publications	18	8
Citations	408	316
H-index	7	6

Peer-reviewed scientific articles

[1] Dai, S. (2023). Variable selection in convex quantile regression: L_1-norm or L_0-norm regularization? *European Journal of Operational Research,* 305, 338-355. [**ABS 4**]

[2] Yi, J., Dai, S., Cheng, J., Wu, Q. and Liu, K. (2021). Production quota policy in China: Implications for sustainable supply capacity of critical minerals. *Resources Policy*, 72, 102046.

[3] Dai, S., Zhou, X, Kuosmanen, T. (2020). Forward-looking assessment of the GHG abatement cost: Application to China. *Energy Economics*, 88, 104758. [**ABS 3**]

[4] Kuosmanen, T., Zhou, X., Dai, S. (2020). How much climate policy has cost for OECD countries? *World Development*, 125, 104681. [**ABS 3, JUFO 3**]

[5] 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. [**ESI top 1%**; Highly cited paper]

[6] 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, 557-580.

[7] 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.

[8] Cheng, J., Dai, S.*, Ye, X. (2016). Spatiotemporal heterogeneity of industrial pollution in China. *China Economic Review*, 40, 179-191.

Submissions

[1] Liao, Z., Dai, S.*, Kuosmanen, T. Convex support vector regression. *European Journal of Operational Research* (R&R). December 2022.

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[1] Google scholar: https://scholar.google.fi/citations?user=mnVXUI4AAAAJ&hl=fi
[2] Scopus: https://www.scopus.com/authid/detail.uri?authorId=57190214759

[2] Yi, J., Dai, S., Cheng, J., Liu, K. How urban sprawl affects local and adjacent ecosystem services? Evidence from a spatial analysis of China. *Regional Environmental Change* (R&R). September 2022.

[3] Dai, S., Kuosmanen, T., Zhou, X. Non-crossing convex quantile regression. *Economics Letters* (R&R). September 2022.

[4] Dai, S., Kuosmanen, T., Zhou, X. Partial frontiers are not quantiles. *European Journal of Operational Research* (R&R). August 2022.

[5] Yi, J., Dai, S., Cheng, J., Dai, Y. Does renewable energy policy trigger resource misallocation? Evidence from Chinese zombie firms. *The Energy Journal* (Submitted). August 2022.

[6] Kuosmanen, T., Tan, A., Dai, S. Performance analysis of English hospitals during the first and second waves of the coronavirus pandemic. *Health Care Management Science* (R&R). August 2022.

[7] Dai, S., Fang, Y., Lee, C., Kuosmanen, T. pyStoNED: A Python Package for Convex Regression and Frontier Estimation. *Journal of Statistical Software* (R&R). May 2022.

Selected work in progress

[1] Dai, S., Kuosmanen, T., Zhou, X. Green total factor productivity: Quantile shadow-price Fisher index approach.

[2] Dai, S., Kuosmanen, T., Zhou, X. Endogeneity bias of convex regression: Monte Carlo evidence.

[3] Kuosmanen, T., Kuosmanen, N., Dai, S. Synergies and tradeoffs in sustainable development.

Python package

[1] Dai, S., Fang, Y. H., Lee, C. Y., Kuosmanen, T. A Package for Stochastic Nonparametric Envelopment of Data (StoNED) in Python. https://github.com/ds2010/pyStoNED.

Technical Reports

[1] Kuosmanen, T., Kuosmanen, N., Dai, S. (2022) Kohtuullinen muuttuva kustannus sähkön jakeluverkkoyhtiöiden valvontamallissa: Ehdotus tehostamiskannustimen kehittämiseksi 6. ja 7. valvontajaksoilla vuosina 2024–2031. Energiavirasto, Finland. https://www.researchgate.net/publication/363771054

[2] Dai, S., Kuosmanen, N.; Kuusi, T., Kuosmanen, T. (Editor), Liesiö, J., Maczulskij, T. (2022) Misallocation of labor and capital in Finland's business sector. Prime Minister's Office of Finland. http://urn.fi/URN:ISBN:978-952-383-212-1

Thesis

[1] Dai, S. (2022) Essays on Convex Regression and Frontier Estimation. Aalto University School of Business, Finland. http://urn.fi/URN:ISBN:978-952-64-0900-9

8. Teaching merits

Aalto University School of Business (2019-2022)

Supervision of M.Sc. theses: Joni Lehtelä (2020), Jasper Mäkelä (2021).

Preliminary examiner of M.Sc. theses: 12 M.Sc. theses from July 2020.

Teaching Assistant at B.Sc. and M.Sc. levels: Econometrics (30C00200) (January 2019, 2020, 2021, and 2022), Productivity and Efficiency Analysis (30E00300) (March 2020).

9. Awards and honours

HSE Support Foundation. A sum of 3.2 k€ for *Recognition awards for quality publications*, 2019, 2022.

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

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

Ministry of Education of the P.R.C. A sum of CNY 10k for *National Encouragement Scholarship for undergraduates*, 2011, 2012.

10. Other key academic merits

Memberships and positions of trust in scientific communities

International Association for Energy Economics (IAEE), Association of Environmental and Resource Economists (AERE)

Referee for scientific publications

Economic Analysis and Policy, Environmental and Resource Economics, Emerging Markets Finance and Trade, Journal of Cleaner Production, Journal of Environment Management, Journal of Regulatory Economics, Journal of Regional Science, Resources Policy

Conference presentation

2022	32nd EURO conference, 17th EWEPA
2021	31st EURO conference, 29th SRAE annual conference
2020	12th (virtual) WCES conference, 11th (virtual) NAPW
2019	16th EWEPA, 42nd IAEE conference
2018	6th IAEE Asian Conference, 6th WCERE
2016	RSAC Annual Meeting, 6th Asian Seminar in Regional Science

Programming skills

Python, Julia, GAMS, Stata, LaTeX