Jinquan Ye

Duke University, Nicholas School of the Environment, Master of Environmental Policy
Email: jinquan.ye@duke.edu
ORCID: 0000-0002-4695-9570
Web: jinquan.site

Educational background

Duke University, GPA:3.90/4, Nicholas School of the Environment, *Master*   2023 - 2025

Nanchang University(Project 211), Management Science and Engineering, *Undergraduate*   2018 - 2022

Papers

Ye, J., Marlon, J., Dong, X., Xie, J., Tian, X., ... (2023). Growing climate change concern but rising regional disparities in China. **(Co-first author, submitted to Nature Communication, Click Here)**

Ye, J., Song, Y.,...,(2022). Assessment of medical waste generation, associated environmental impact, and management issues after the outbreak of COVID-19: A case study of the Hubei Province in China. PloS one. **(First author ,Click Here)**

Ye, J.,..., (2022). Meta-analysis of Climate Change Experience and Climate Change Perception. Environmental Research Communication.**(Co-first author, Click Here)**

Ye, J.,(2022). Public concerns about vehicle-to-grid are preventing its rollout: a content analysis of Chinese social media. **(working paper)**

Research experience

The Environmental Research Center, Prof. Junjie Zhang's RA   2023.3 - Now

- *Detail*: The main work is related to green finance. Leveraging GPT's ability to understand unstructured information, important information from corporate reports as well as news is extracted. This unbiased approach ultimately leads to an objective evaluation of a company's ESG and an assessment of its risk of greenwashing.
- *Responsibility*: 1. develop a detailed research proposal, 2. recruit suitable students to collaborate, 3. summarize and revise the outputs of team members, 4. write the complete Python code of the project and change the api calling strategy to make it economically sustainable, 5. create a complete and easy-to-manage database to generate structured corporate disclosure data.
- *Outcome*: 1.Results were presented at the 2023 Green Finance North Bund Forum, Shanghai, China. Produced The Climate Disclosure and Carbon Accounting in the Banking Sector Research Report (2023). 2.The partial results were presented at the "Frontiers in ESG Research Workshop" held by the HKU Business School. 3.Generating a structured database of ESG disclosure(not available to the public).

Nanjing Normal University, Prof. Chuanpeng Hu's RA   2022.3 - 2022.9

- *Detail*: The main research is related to meta-analysis. Contributed to a meta-analysis on "variability in socio-economic status measures"
- *Responsibility*: Extracts of information from the target article related to the socioeconomic status of the subject and the components that constitutes the SES
- *Outcome*: 1.Complete the meta-analysis, produce a public dataset, and create an R package(SESverse) 2.Published in Environmental Research Communications.

National-level Student Innovation Training Program, Project leader   2020.9 - 2021.5

- *Detail*: Text data from social media was analysed, using python to crawl and process the text to extract people's views on V2G technology in electric vehicles
- *Responsibility*: Filing, data collection, field research, data analysis and closing arguments
- *Outcome*: 1.Selected as the Faculty's Outstanding Innovation Project 2.Complete an essay on the attitude of the public towards V2G technology in new energy vehicles

National level research training project: Digital Business Innovation, Member   2019.3 - 2019-6

- *Detail*: Responsible for writing the third chapter of the monograph: Digital Survival Theory

- *Responsibility*：Examines and summarises the current digital divide and gives recommendations for individuals and businesses to improve their digital literacy
- *Outcome*：1. Completion of selected chapters in a monograph 2. Participation and independent presentation at an academic conference (FEMIB2020)

National University of Singapore, Visiting Exchange   2019.7 - 2019-8

- *Detail*：Participated in the Innovation Management Programme at the National University of Singapore
- *Responsibility*：Organise the group to collect and summarise the debriefing materials and present the results for a presentation
- *Outcome*：Awarded the title of Group of Distinction

Academic Support & Review

Journal: Energy Research & Social Science (JCR Q1)

Teaching: The 4th ESE Summer School (Resources, Conservation & Recycling)- neural networks with Python

Conference: SSEME2023

Research skills

Programming: Proficient in Python (web acquisition, natural language processing, langchain, sentiment classification models, multi-region input-output, data cleaning), R (ggplot2, econometric models, Structural equation modelling, Meta-analysis, autoMRP)

Social Science Software：Stata/SPSS(Traditional econometric models), Ucient(Social network analysis), Citespace(Bibliometric)，Geoda(Analysis of GIS data)

Other：LaTeX, Mathematica(Matrix operations), Lingo(Operations Research), Octopus(Web data acquisition)

English: IELTS: Overall:6.5, L:7.0 R:7.5 W:6.0 S:5.5

Python Package Development: Developed SECFC (Survey Embedded Carbon Footprint Calculator), a Python package to calculate carbon footprints from survey data. Developed LLMeta, a Python package for conducting systematic reviews using large language models in conjunction with Retrieval-Augmented Generation (RAG) and Hypothetical Document Embeddings (HyDE) techniques.

Intramural funding

Duke University, Leveraging GPT-4 for ESG Evaluation   2023-2024

Nanchang University, A correlation analysis of the spatial and temporal evolution of mass opinion sentiment in economic and social media in the post epidemic era   2019-2021

Nanchang University, A study of the environmental impacts of medical waste and policy effectiveness in the context of COVID-19   2019-2020

Awards

Social Impact Program Scholarship, Duke University	2024-06
The 18th National Graduate Student Environmental Forum in China, Third Prize	2023-05
Nanchang University, Outstanding Student Scholarship	2021-06
First Prize in the Chinese National Student Mathematical Modelling Competition	2020-11
Energy Saving and Emission Reduction Competition, Nanchang University, Third Prize	2020-06
Asia-Pacific Mathematical Modelling National Second Prize	2019-12
International Youth Mathematics Challenge (IYMC) - Gold Medal(Top 3%)	2019-10
China National Student Extracurricular Academic and Technological Works Competition, Third Prize	2019-01