Ziqian Xia

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EDUCATION

Bachelor of Economics in Economic Statistics (Major)
Bachelor of Science in Applied Psychology (Minor)   Expected Summer 2022
Nanchang University, Nanchang, China PR (NCU)
Attending a specially established elite school: **Jiluan Academy**
GPA: 86.43   RANK:33/90

Business and Culture Program (Exchange Program)   July 2019
Waseda University, Tokyo, Japan (WU)

The Analysis Methods of Social Survey Data (Summer School)   June 2020
Peking University, Beijing, China PR (PKU)

Visiting Student - Mitacs Globalink Research Interns   Expected June 2021 – Sep 2021
University of Winnipeg, Canada (UWinnipeg)

RESEARCH INTERESTS

Environmental Economics; Behavioral Economics; Spatial Econometrics

LAB POSITIONS

Undergraduate Research Assistant   **2018 - Present**
Institute of Circular Economy, Nanchang University, China
- Assist Lab team in data collection and cleaning, Managing the team's database.
- Document sorting and coordination.
- Contribute to data visualizations and simulations in the paper.

Mitacs Globalink Research Interns   **2021**
University of Winnipeg & University of Manitoba, Canada
- Assist in Spatial analysis and GIS modelling.
- Assist the senior research assistant in preparing reports and manuscript.

Project Research Assistant   **2020 - 2021**
Institute of soil and water conservation (ISWC), Chinese Academy of Sciences (CAS), China

- Assist in data cleaning, data visualization, and building machine learning models.
- Mapping and analysis of fine root data distribution.

PUBLICATIONS

Journal Paper:

Aiding Pro-Environment Behavior Measurements by Internet of Things,
Resources, Recycling and Conservation (Under review)

Understanding waste sorting behavior and key influencing factors through big data based on Internet of Things,
Resources, Recycling and Conservation (Under review)

Public Sentiment Analysis of New Energy Vehicle: A Case Study of Chinese Internet Data,
Renewable & Sustainable Energy Reviews (Under review)

RESEARCH EXPERIENCE

Exploring the behavioral factors of waste sorting in circular economy (PI)   **2020 - 2021**

Funded by Institute of Circular Economy, Nanchang University.
➢ Using IoT data to analyze the behavior of waste sorting.
➢ PLS-SEM modeling through questionnaire survey combined with big data mining.
➢ The real factors influencing residents' waste sorting behavior were obtained.

Estimation of medical waste output and its environmental impact in COVID-19 (PI)   **2020 - 2021**

Funded by Province-Level Training Program of Innovation and Entrepreneurship, Nanchang University.
➢ Establish a counterfactual prediction model of medical waste production using deep learning algorithm.
➢ Estimate medical waste produced by COVID-19's environmental net effects using life cycle database.
➢ The estimation methods of medical waste were summarized.

Integration and mining analysis of global fine root functional trait data (PI)   **2019 - 2020**

Funded by Institute of soil and water conservation (ISWC), Chinese Academy of Sciences (CAS).
➢ Bibliometric study and review writing of global biological fine roots.
➢ Meta-analysis of multiple fine root biotypes and environmental indicators.
➢ Mapping the distribution and traits of fine roots in China and completing the report.

The integration and pole effect of Yangtze River Economic Belt (CO-PI)   **2019 - 2020**

Funded by National-Level Training Program of Innovation and Entrepreneurship, Nanchang University.
➢ The regional economic vitality index has been formulated.
➢ Markov algorithm is used to study the future economic vitality of the Yangtze River economic belt.
➢ Team cooperation completed the Yangtze River Economic Belt Integration Research Report.

SELECTED HONORS AND AWARDS

First-class / Second-class scholarship of Nanchang University	2019/2020
Contemporary Undergraduate Mathematical Contest in Modeling: First Prize	2020
International Youth Math Challenge: NO.1 Prize	2019
Asia and Pacific Mathematical Contest in Modeling: Second Prize	2019
National Contest for College Business English Knowledge: First Prize	2020
National undergraduate market survey and Analysis Competition: First Prize	2020
Excellent college student volunteers of Xinzhou Red Cross Society	2019

TECHNICAL SKILLS

Programming languages: *R (Main)*, Python*

Social Science Package: *SmartPLS, Stata*

Geography Package: *QGIS, Geoda*

Others: *Latex*

*Note: Most of the works was done by R.

LANGUAGES

Chinese: Fluent

English: Proficient

Japanese: Primary

FURTHER EDUCATION / SELF-LEARNING

Basic Statistics, an online course by University of Amsterdam on Coursera. Certificate earned **February 4, 2020**

R Programming, an online course by Johns Hopkins University on Coursera. Certificate earned **February 26, 2020**

Advanced R Programming, an online course by Johns Hopkins University on Coursera. Certificate earned **March 4, 2020**

Time Series Analysis in R/ Unsupervised Learning in R/ Structural Equation Modeling with lavaan in R and other 8 R Programming online courses by Datacamp.