**CV**

# 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**                    June 2021 – Sep 2021
University of Winnipeg, Canada (UWinnipeg)

## RESEARCH INTERESTS

Environmental Economics; Behavioral Economics; Spatial Econometrics

## PUBLICATIONS

*Journal Paper:*

Understanding waste sorting behavior and key influencing factors through big data based on Internet of Things,
*Resources, Conservation and Recycling* **(Accepted, Click Here)**

Aiding Pro-Environment Behavior Measurements by Internet of Things,
*Current Research in Behavioral Sciences* **(Accepted, Click Here)**

*Working Papers:*

A systematic review and meta-analysis of psychological strategies to reduce food waste

Discontinuance in waste sorting behavior by the lens of Social Network and IoT

Information against inaction: IoT-based Intervention experiment on waste sorting behavior

## 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.

## SOCIETY MEMBERSHIPS

**The International Society for Industrial Ecology (ISIE)**

**The International Association of Applied Psychology (IAAP)**

## 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**.**