

Education

Huazhong University of Science and Technology

Wuhan, China

Master of Medical Management Information Systems

09/2020-06/2023

Research Area: Modeling and intervention evaluation of public health emergencies.

Goethe University Frankfurt

Frankfurt, German

Semester Abroad (Business Analysis)

01/2019-02/2019

Master of Management Industrial Engineering

Xi'an, China

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09/2016-07/2020

Key Courses (Final grade average: A): Engineering Economics; Applied Statistics; Operational Research

Publications

Xidian University

- ➤ Ma Xiaohan, Ouyang Hui, AI Shizhong, Wu Xiang. Diffusion Model and Platform Strategy of Medical Crowdfunding Projects based on Agent-based Modeling[J]. Journal of Information Resources Management (Revised and Resubmitted).
- ➤ Ouyang Hui, Ma Xiaohan, Wu Xiang. The prevalence and determinants of COVID-19 vaccine hesitancy in the age of infodemic[J]. Human Vaccines & Immunotherapeutics, 18(1): 2013694.
- > Shiyuan Yu, Ma Xiaohan, Wu Xiang. The impact of wearable devices on physical activity for chronic patients[J]. Information Technology & People (Submitted).
- ➤ Ma Xiaohan, Wu Xiang. The influence of prosocial motivation on vaccination and disease diffusion based on Agent-based modelling (Manuscript).
- > "A review of the impact of health policies on COVID-19 transmission", Li Zemin, Ma Xiaohan. Presented at the 33rd China Simulation Conference and the 21st Asian Simulation Conference.

Research Experiences

Research Assistant, Department of Medicine and Health Management, HUST Disease Diffusion Research. Team Leader

09/2020-Present

- Constructed vaccination behaviour and disease diffusion mechanism.
- > Developed an R package aiming to analyze COVID-19 diffusion and policy interventions.
- > Assist in designing simulation experiments (screening experiment and formal experiment) and analysing simulation results.

National Natural Science Foundation of China (72071090): Research on self-management mechanism and optimization strategy of chronic diseases based on intelligent wearable devices. Participant 10/2021-06/2021

- > Search relevant literature and sort out core theories.
- > Entered, summarized and visualized survey data using R.

Research Assistant, Department of Economics and Management, Xidian University

Thesis (Excellent graduation thesis): Diffusion Model and Platform Strategy of Medical Crowdfunding Projects based on Agent-based Modeling. 06/2019-06/2020

- > Designed an individual-decision mechanism of forwarding medical crowdfunding projects on social media.
- > Constructed mathematical model of the individual-decision mechanism based on Bass diffusion model.
- ➤ Developed a simulation model based on agent-based modelling; Analyzed diffusion process and platform strategies using R.

Internships

United Nations Conference on Trade and Development

Methodology unit of the Statistical Service Intern

Geneva, Switzerland 08/2022-Present

- > Proofread R scripts and highlight points in code that need further explanation; Test statistical software to measure services trade developed at the Statistics Service and report bugs.
- > Prepare data visualization and infographics; Assist in the preparation of the Handbook of Statistics.

Tencent Cloud Computing (Xi'an) Co., Ltd.

Xi'an, China

Administrative Assistant Intern

07/2020-09/2020

- > Organized employee activities, scheduled meetings and coordinated appointments.
- > Streamlined communication between executives in other departments.

Midea Group Co., Ltd.

Guangdong, China 07/2019-09/2019

Technical Project Manager Intern

- > Analyzed data including data cleaning, descriptive analysis and data visualization using R.
- > Developed project documentation and built realistic, functional product prototypes using Axure.

Extra-curricular Activities

- > 2/08/2021-20/08/2021 United Nations Internship Preparation Programme by United Nations Institute for Training and Research. Participated in webinars focusing on inclusive leadership, public speaking skills and negotiation skills.
- > 01/2021-02/2021 Summer Global Youth Forum 2021 by International Training Centre of International Labor Organization. Analyzed the linkage of various objectives in SDGs with different cultural backgrounds and designed a group project for achieving SDG4.
- ➤ 04/2018-07/2018 Business analysis competition. Investigated the bus stations in Germany on the spot and analyzed the improvement needs.
- > 04/2018-07/2018 Marketing competition. Analyzed questionnaire data and proposed solutions for the development of local tourism.
- > 04/2017-07/2017 Entrepreneurship competition. Collaborated with a team to design a robot for inheriting Chinese traditional culture.

Awards

- ➤ The First Prize Scholarship (2019-2020); The Second Prize Scholarship (2020-2021) by Huazhong University of Science and Technology.
- > Technological Innovation Award (2016-2017), Excellent Volunteer Team (2017) by Xidian University.
- ➤ The Second Prize Scholarship (2017-2018; 2018-2019) by Xidian University.
- ➤ Excellent graduation thesis (2020) by Xidian University.
- > The First prize in Business Analysis Competition by Goethe University Frankfurt.
- > Excellent Team Award of a Marketing Competition (2018) by Shaanxi province.

Skills and Languages

- > Skills: R, Python, R packages analyzing disease diffusion, agent-based modelling, mathematical modelling; simulation experiment.
- ➤ Languages: Chinese, English (IELTS 7.0), German (Basic level), French (Basic level).

Date of Birth: 02.12.1997 | Nationality: Chinese

Email: xiaohanma.hust@gmail.com | Phone:

OVERVIEW

- Master's degree in Medical Information Systems
- Solid knowledge of the United Nations system
- Proficient in data analysis tools: R, Python, Excel
- Bachelor's degree in Management Industrial Engineering
- Fluent in Chinese, English, French and German
- Experience in developing R packages analyzing disease diffusion

EDUCATION

Huazhong University of Science and Technology

| Focus on Health Information Management and Econometrics

Research Area: Modeling and intervention evaluation of public health emergencies

Master Thesis: "The influence of prosocial motivation on vaccination and disease diffusion

based on Agent-based modeling"

United Nations Institute for Training and Research

Training Program | Focus on International Politics and The UN Systems

Final grade average: (A)

Online 17 Jan 2022 – 13 Feb 2022

Wuhan, China

Online

Sep 2020 - Jun 2023

Jan 2022 – 13 Feb 2022

2 Aug 2021 - 20 Aug 2021

International Training Centre of International Labor Organization

Training Program | Focus on Sustainable Development Goals and Solutions

Final grade average: (A)

Goethe University Frankfurt

Semester Abroad | Focus on Business Analysis

Final grade average: (A)

Frankfurt, German

Jan 2019 - Feb 2019

Sep 2016 - Jun 2020

Xi'an, China

Xidian University

M.A. in MIS

B.A. in MIE

| Focus on Applied Statistics, Project Management and Engineering Economics

Final grade average: (A)

Bachelor Thesis: "Diffusion Model and Platform Strategy of Medical Crowdfunding Projects

based on Agent-based Modeling"

RESEARCH EXPERIENCE

Publications and Presentation

- 1. Ma Xiaohan, Ouyang Hui, AI Shizhong, Wu Xiang. Diffusion Model and Platform Strategy of Medical Crowdfunding Projects based on Agent-based Modeling[]]. Journal of Information Resources Management (Revised and Resubmitted).
- 2. Ouyang Hui, **Ma Xiaohan**, Wu Xiang. The prevalence and determinants of COVID-19 vaccine hesitancy in the age of infodemic[J]. *Human Vaccines & Immunotherapeutics*, 18(1): 2013694.
- 3. Shiyuan Yu, **Ma Xiaohan**, Wu Xiang. The impact of wearable devices on physical activity for chronic patients[J]. The Journal of the American Medical Association (Revised and Resubmitted).
- **4. Ma Xiaohan**, Wu Xiang. The influence of prosocial motivation on vaccination and disease diffusion based on Agent-based modeling. (Manuscript)
- 5. "A review of the impact of health policies on COVID-19 transmission", Li Zemin, Ma Xiaohan. Presented at The 33th China Simulation Conference and the 21st Asian Simulation Conference.

Research Assistant, Department of Medicine and Health Management, HUST

1. Disease Diffusion Research, Team Leader

Sep 2020 - Sep 2021

- Constructed vaccination behavior and disease diffusion mechanism using agent-based modeling and utility theory.
- Led a team to develop an R package for research work aiming to analyze COVID-19 diffusion and policy interventions .
- 2. National Natural Science Foundation of China (72071090): Research on self-management mechanism and optimization strategy of chronic diseases based on Intelligent wearable devices, Participant Oct 2021 Jun 2022
 - Search relevant literature and sort out core theories
 - Entered, summarized and visualized survey data using R

PROFEFFIONAL EXPERIENCE

Tencent Cloud Computing (Xi'an) Co., Ltd.

Administrative Assistant Intern

Xi'an, China

Jul 2020 - Sep 2020

- Organized employee activities including sports events, team-building activities and workplace Parties.
- Scheduled meetings, coordinated appointments and made minutes and summary of the meeting.
- Streamlined communication between executives in other departments.

Midea Group Co., Ltd.

Technical Project Manager Intern

Guangdong, China Jul 2019 – Sep 2019

- Oversaw the daily tasks of technical personnel and assisted senior Technical Project Manager in all duties, including planning, analysis and scheduling.
- Analyzed data including data cleaning, descriptive analysis and data visualization using R.
- Developed project documentation and built realistic, functional product prototypes using Axure.

EXTRA-CURRICULAR ACTIVITIES

Nature Online Courses by Springer Nature: Data Analysis: Planning and Preparing; Conducting and Troubleshooting

Jun 2021 – Jul 2021

Course Participant

Accomplished courses of research data analysis, Speakers included Prof. Joao Monteiro, Prof. Joao Monteiro, Prof. Bronwyn Wake Prof. Xavier Vilasis-Cardona and others.

Team Project Experiences

Team Leader/Member

- Analyzed the linkage of various objectives in SDGs with different cultural backgrounds in Summer Global Youth Forum 2021

Online Aug 2021 – Aug 2021

Online

- Investigated the bus stations in Germany on the spot and analyzed the improvement needs; Collaborated students of Goethe University Frankfurt and won the first prize of business contest (1/20).

Frankfurt, German Jan 2019 – Feb 2019

- Organized a team to conduct field research in a poverty area; Analyzed questionnaire data and proposed solutions for the development of local tourism; Won the provincial excellent Team Award of a Marketing Competition.

Apr 2018 – Jul 2018

Xi'an, China

- Collaborated with a team to design a robot for inheriting Chinese traditional culture; Collected relevant data and wrote a business plan; Cooperated with the local history museum and exhibited the product in the museum.

Xi'an, China Apr 2017 – Jul 2017

Volunteer Experiences

- A member of Local charity service center which mainly focus on education.

Xi'an, China Feb 2022 - Present

- Organized a volunteer team to help over 500 high school students apply to college.

Xi'an, China Jun 2018

FELLOWSHIPS & AWARDS

Fellowships

- The First Prize Scholarship (2019-2020), The Second Prize Scholarship (2020-2021) by Huazhong University of Science and Technology
- Technological Innovation Award (2016-2017), The Second Prize Scholarship (2017-2018; 2018-2019) by Xidian University

Awards

- Excellent graduation thesis (2020) by Xidian University
- The First prize of Business Analysis Competition by Goethe University Frankfurt
- Excellent Volunteer Team (2017) by Xidian University
- Excellent Team Award of a Marketing Competition by Shaanxi province

LANGUAGES AND SKILLS

Languages Skills

<u>Chinese</u>: Mother Tongue

English: Fluent Speaker (IELTS 7.0)

German: Basic Knowledge French: Basic Knowledge

Interpersonal skills: high cross-cultural sensitivity and adaptation capacity

<u>Professional skills:</u> strong public speaking and presentation skills

<u>Computer skills:</u> advanced knowledge of MS Office and social media

<u>Research skills:</u> research data analysis using R; agent-based modeling;

mathematical modeling; simulation experiment