

JIAHUI XIN

+44 7757 243685 | jiahui.xin@mrc-bsu.cam.ac.uk |  jiahui-xin.github.io

RESEARCH INTERESTS

Adaptive Clinical Trial Design; Covariate- and Response-Adaptive Randomization; Robust Inference; Precision Medicine; Markov Decision Process.

EDUCATION

- **Renmin University of China, Institute of Statistics and Big Data** Sept. 2021 – June 2026 (Expected)
Beijing, China
Ph.D. Candidate in Statistics
 - GPA: 3.84/4.0
 - Supervised by **Prof. Wei Ma**.
- **University of Cambridge, MRC Biostatistics Unit** Jan. 2026 – Present
Cambridge, UK
Visiting Ph.D. Student
 - Hosted by **Dr. David Robertson**.
 - Working on exact inference for covariate-adjusted response-adaptive (CARA) designs in clinical trials, in collaboration with Drs. David Robertson and Stef Baas.
- **University of Science and Technology of China, Special Class for the Gifted Young** Sept. 2016 – June 2021
Hefei, China
B.S. in Statistics
 - Major GPA: 3.95/4.3, Total GPA: 3.75/4.3
 - Initially majored in Physics (Sept. 2017 – June 2018).

PAPERS

- [1] **On the Achievability of Efficiency Bounds for Covariate-Adjusted Response-Adaptive Randomization.**
Jiahui Xin and Wei Ma.
Statistical Methods in Medical Research, 2025.
- [2] **Cross-Validation Model Averaging under Covariate-Adaptive Randomization.**
Fuyi Tu, **Jiahui Xin** and Wei Ma.
Under review at *Statistica Sinica*.
- [3] **Covariate-Adaptive Randomization with Many Strata: Asymptotic Theory and Statistical Inference.**
Jiahui Xin, Hanzhong Liu, Feifang Hu and Wei Ma.
Manuscript in preparation for submission to *Biometrika*; early version available on arXiv:2405.18856.
- [4] **Covariate-Adaptive Enrollment for Single-Arm Trials Using External Controls.**
Jiahui Xin, Hengjia Fang, Zhiyue Huang, Satoshi Yoshida and Wei Ma.
Working paper.

TALKS

- **Drug Information Association, Quantitative Science Forum** 2025
Nanjing, China
Invited Speaker
- **Chinese Statistical Association of Young Statisticians, Ph.D. Student Forum** 2025
Jinan, China
Travel Award & Oral Presentation
- **National Graduate Student Statistics Forum, Biostatistics and Epidemiology Section** 2024
Beijing, China
Selected Paper & Oral Presentation

INTERNSHIP EXPERIENCE

- **Astellas Pharma [●] (Clinical Biometrics Function)** June 2025 – Aug. 2025
Beijing, China
Clinical Biostatistics Intern, Adaptive Strategy
 - Mentors: **Dr. Zhiyue Huang** and **Satoshi Yoshida**.
 - Developed adaptive enrollment strategies for single-arm survival trials under practical covariate shift.
 - Presented project results in internal seminars, including the summer internship presentation, a China–Japan joint statistics meeting, and a “Mike Smith” series meeting within the Clinical Biometrics Function.
- **Honor Device [●] (R&D Management Department)** July 2021
Nanjing, China
R&D Intern, Audio Augmentation
 - Mentor: **Dr. Lei Fang**.
 - Augmented synthetic speech with room-reverberation simulation to boost automatic speech recognition robustness.

TEACHING ASSISTANT EXPERIENCE

• Renmin University of China	<i>Adaptive Design and Reinforcement Learning</i>	Spring 2025 Beijing, China
• Renmin University of China	<i>Advanced Statistical Computation</i>	Fall 2024 Beijing, China
• Renmin University of China	<i>Advanced Applied Statistics and Data Analysis</i>	Spring 2024 Beijing, China
• Renmin University of China	<i>Statistical Models and Inference</i>	Fall 2022 Beijing, China
• University of Science and Technology of China	<i>Complex Analysis</i>	Spring 2020 Hefei, China
• University of Science and Technology of China	<i>Optics and Atomic Physics</i>	Spring 2019 Hefei, China

OTHER EXPERIENCE

• Causal Analyses of Complex Experiments	<i>Yau Mathematical Sciences Center, Tsinghua University</i>	Dec. 2025
• Causal Inference and A/B Testing	<i>Guanghua School of Management, Peking University</i>	Short course by Prof. Peng Ding (UC Berkeley) July 2024 – Aug. 2024
• Reinforcement Learning	<i>Institute of Statistics and Big Data, Renmin University of China</i>	Business Analysis Workshop by Tencent Dec. 2023
• Topics and Recent Advances in Causal Inference	<i>Yau Mathematical Sciences Center, Tsinghua University</i>	Short course by Prof. Chengchun Shi (LSE) June, July & Dec. 2023
• Semiparametric Learning	<i>Institute of Statistics and Big Data, Renmin University of China</i>	Short course by Prof. Peng Ding (UC Berkeley) July 2023
		Short course by Prof. Yanyuan Ma (Penn State)

SKILLS

- **Programming & Tools:** R, C++, Python, Julia, Linux, Git

REFERENCES

- **Dr. Wei Ma** [✉]
Ph.D. Supervisor
 - Associate Professor
Institute of Statistics and Big Data
Renmin University of China
59 Zhongguancun Street
Beijing 100872, China
Phone: +86 10 6251 2209
Email: mawei@ruc.edu.cn
- **Dr. Hanzhong Liu** [✉]
Collaborator
 - Associate Professor
Department of Statistics and Data Science
Tsinghua University
30 Shuangqing Road
Beijing 100084, China
Phone: +86 10 6278 0575
Email: lhz2016@tsinghua.edu.cn
- **Dr. Feifang Hu** [✉]
Collaborator
 - Professor and Department Chair
Department of Statistics
George Washington University
801 22nd St. NW
Washington, DC 20052, USA
Phone: +1 804 310 0383
Email: feifang@gwu.edu