# Wang, Xieheng

(+86)13905271221 wxh19@mails.tsinghua.edu.cn Tsinghua University https://mariana2000.github.io/

#### **EDUCATION**

Tsinghua University Sep 2019 - Jun 2023

Undergraduate of Measurement, Control Technology and Instruments, Department of Precision Instrument Beijing, China

- GPA: 3.72/4.00 (Ranking: 20/56)
- Relevant Coursework: Calculus A(1) (A), Calculus A(2) (A), Linear Algebra (A-), Probability and Statistics (A-), Programming Fundamentals (A-), Theoretical Mechanics (A-), Introduction to Complex Analysis (A-), Machine Learning and Brain Inspired Intelligence, Fundamentals of Statistical Signal Processing (Ongoing)

Tsinghua University

Mar 2021 - Jun 2023

Undergraduate of Statistics (Minor), Department of Industrial Engineering

Beijing, China

- GPA: 3.84/4.00
- Relevant Coursework: Elementary Probability Theory, Statistical Inference (A), Multivariate Statistical Analysis, Linear Regression Analysis (A-), Introduction to Causal Inference (A-), Introduction to Data Science, Introduction to Bayesian Statistics (Ongoing), Applied Time Series Analysis (Ongoing)

### RESEARCH EXPERIENCE

# Tsinghua University (Center for Statistical Science)

Oct 2021 - Present

Mentor: Jingyi Zhang (Assistant Professor at the Center for Statistical Science)

**Topic:** Application of POTD(Principal Optimal Transport Direction) on Simulation Data and Real Dataset **Responsibilities:** literature review, applied TD-SDR(a method proposed for linear dimension reduction based on POTD) on some simulation data and compare the result with some traditional SDR methods, applied POTD on MQTT-IoT-IDS2020 dataset to extract fearures distinguishing different attacking ways.

## Tsinghua University (Department of Precision Instrument)

Sep 2020 - Dec 2021

**Mentor:** Kaichun Zhao (Associate Professor at the Department of Precision Instrument) **Topic:** Design and Construction of Vision-based Quadrotor Navigation Control System

**Responsobilities:** literature review, applied some popular deep-learning and visual SLAM methods on real image data obtained by drone in the environment of smoke and interruption.

# **HONORS & AWARDS**

| Academic Excellence Scholarship | Oct 2021 |
|---------------------------------|----------|
| Sports Excellence Scholarship   | Oct 2021 |
| Academic Excellence Scholarship | Oct 2020 |
| Sports Excellence Scholarship   | Oct 2020 |

### ADDITIONAL INFORMATION

### **Research Interests**

• high-dimensional statistics, dimension reduction, causal inference, bayesian statistics, spatial statistics

### Skills

- Familiar with R
- Python, C/C++, Matlab

#### **Standardized Tests**

• TOEFL: 102

• GRE: Verbal 154, Quant 169, AW 3.5

• CET-6: 630