# Yifan Wang

✉ wangyifan@tongji.edu.cn      ✉ yw9871@nyu.edu      ✉ yifanwang1017@gmail.com

📞 +86 18817813692      🌐 yifanwang1017.github.io

## Education

**2022 - now**   **Master, Tongji University**
Major: Transportation Engineering, College of Transportation
Advisor: Prof.Xuesong Wang
English: IEILS 6.5 (6.0)
GPA: 85.6/100

**2018 - 2022**   **Bachelor, Tongji University**
Major: Applied Mathematic, College of Mathematical Science
GPA: 87.8/100

## Work Experience

**2025.10 - now**   **Research Assistant, New York University Shanghai**
Department: Computer Science
Advisor: Prof.Zhaonan Wang

## Research Publications

### Journal Articles

1. **Y. Wang**, X. Wang*, T. Wang, and M. Quddus, "Freeway real-time crash prediction using floating car data," *Transportation Research Part C: Emerging Technologies (Q1 TOP, IF=7.9)*, vol. 171, 2025. 🔗 DOI: 10.1016/j.trc.2025.105009.

2. **Y. Wang** and X. Wang*, "Causal relationship discovery for highway crash analysis using semi-data-driven Bayesian network.," *Accident Analysis and Prevention (Q1, IF=6.2)*, vol. 221, 2025. 🔗 DOI: 10.1016/j.aap.2025.108181.

### Conference Proceedings

1. **Y. Wang**, Z. Chen, and X. Wang*, "Optimization of road geometry parameters based on vehicle operation state," in *Transportation Research Board 104th Annual Meeting*, Washington D.C., USA, 2025.

## Projects

### *MIT-UF-NEU 2025 Joint Summer Research Camp*

**2025.05 - 2025.09**   Research topic: Uncertainty quantification and calibration of EV charging demand. The camp is hosted by Prof.Jinhua Zhao at MIT, Prof.Shenhao Wang at UF, Prof.Haris Koutsopoulos at NEU. I worked with Dr.Yunhan Zheng at MIT.

## Projects (continued)

### *Operational Safety Evaluation of Autonomous Driving Vehicles*

2023.12-2024.04
- Collect the traffic participant data extracted from the cameras installed on the roadside.
- Identify the target vehicle trajectory from the traffic participant data.

### *Driving Alertness Screening and Application Research*

2022.09-2023.02
- Merge different datasets from driving simulation experiments, and write a manual about data cleaning.
- Build the statistical models and analyze the important factors of brake reaction time and lane departure.

### *Traffic Safety Management and Risk Control in Suzhou, China*

2023.09-2024.06
- Analyze the relationships between different variables using the Bayesian network, like traffic flow, weather, and crash.

## Skills

Software
- Python, Matlab, Stata, SPSS, ArcGIS, LaTeX

Ability
- Advanced statistic analysis, Causal inference, Machine learning, Traffic big data

## Miscellaneous Experience

### Awards and Achievements

2019
- **Second prize**, National college students mathematics competition, Mathematical society of China.

2020
- **Third scholarship**, Tongji University.
- **Scholarships for social activities**, Tongji University.

### Organization Experience

2020-2021
- **Chairman**, Mathematics modeling organization, Tongji University.