

Code JS008-202407 (JMOL_2301BIII)

Name Résumé of Yunqing Jia

Deliberation Date 2024.7.15

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Content Structure 7 Sections

> Authorization JPNCSC (8-7.1) JSDC (8.7-1)

JLRC (8-7.1)

Implementation **JMOL**

JMOE JMFC

JNSC Collector of Supervision

Academic Integrity (JCAI)

Accordance JL000-202302 - IV

JL001-202302 - 89 (VI)

JL003-202308 JL007-202308 JL009-202308 JP000-202407

Publication Level

II-c





Yunging Jia

Date of Birth: Sept. 7th, 1999 Master of Engineering (Academic Degree) School of Transportation Southeast University, Nanjing, P. R. China

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EDUCATION

•Southeast University

M.E. in Transportation Information Engineering and Control

•Chang'an University

B.E. in Transportation Engineering (Bilingual Program)

Sept. 2021 - Jun. 2024

GPA: 3.81/4.0

Sept. 2017 - Jun. 2021

GPA (Percentage): 3.73/4.0 (Top 10%)

Publication

He, Y., Jia, Y., Jia, Y., An, C., Lu, Z. & Xia, J. An integrated intra-view and inter-view framework for multiple traffic variable data simultaneous recovery, in IEEE Transactions on Intelligent Transportation Systems, doi: 10.1109/TITS.2024.3414506.

Chen, X.*, & **Jia**, **Y.** (2021). Sustainable traffic management and control system for arterial with contraflow left-turn lanes. Journal of Cleaner Production, 280, 124256.

SELECTED CONFERENCE PRESENTATION

Chen, X * & **Jia, Y.**. Traffic signal optimization for mitigating pollutant emissions of grid intersections with contraflow left-turn lanes. 2024 TRB Annual Meeting, January 7-11, 2024, Washington, D.C., United States.

Jia, Y., An, C. *, Lu, Z., & Xia, J. Joint optimization of time-of-day intervals and robust signal timing for isolated intersection. 23rd COTA International Conference of Transportation Professionals, July 14-17, 2023, Beijing, China

RESEARCH (R) & PROJECT (P) EXPERIENCE

•Joint Optimization of Connected Bus Trajectory and Traffic Signal (R)

Jan. 2023 - Present

- Link transmission model, model predictive control, moving bottleneck, mixed traffic flow.

•Traffic Signal Optimization of Intersections with Contraflow Left-turn Lanes (R)

ptimization of Intersections with Contraflow Left-turn Lanes (R)

Apr. 2018 - Mar. 2024

- [Jul. 2021 Mar. 2024]: Network-level intersections, nonlinear programming.
- [Jul. 2019 Sept. 2020]: Arterial-level intersections, multi-objective sustainability, NSGA-II.
- [Apr. 2018 May 2019]: Isolated intersection, queue accumulation polygon, genetic algorithm.

Urban Road Network Modeling & Simulation Based on Field Data (P)

Feb. 2022 - Feb. 2024

- A matrix-based coding method for capturing road network topology & traffic demand.

TECHNICAL SKILLS AND INTERESTS

Languages: Mandarin (1^{st} language), English (IELTS: 7.5 till Jun. 2025), French (2^{nd} foreign language course).

Programming: MATLAB R2022a, Python 3.10, Visual Basic 6.0, XML.

Developer Tools: MATLAB GUI, Anaconda (Pycharm, Spyder), VS Code (Latex, Github Pages).

Transportation Software: VISSIM 11, AIMSUN 8.3.0, SUMO 1.18.0, Synchro 10, TransCAD 6.0, AutoCAD 2014.

Areas of Interest: Joint estimation of urban traffic state & model parameters utilizing AI / ML methods, multi-modal traffic flow modeling, large-scale traffic signal optimization under mixed traffic flow.

Positions of Responsibility

•Student Association for Innovation and Entrepreneurship, School of Highway, Chang'an University. 2017 - 2020 Deputy chairman (2019 - 2020)

•Highway Transportation Museum, Chang'an University.

2018 - 2019

Guide

SELECTED AWARD

Jiangsu Provincial Research Smart Transportation Innovation and Practice Competition (3^{rd} Prize)	2022
MatherCup University Mathematical Modeling Competition (1^{st} Prize)	2022
The 18^{th} China Post-Graduate Mathematical Contest in Modeling (3^{rd} Prize)	2021
'Challenge Cup' Shaanxi Provincial College Student Competition - Academic Works (1^{st} Prize)	2021
China Undergraduate Mathematical Contest in Modeling - Shaanxi Province (2^{nd} Prize)	2019
The 9^{th} Transportation Science & Technology Competition of Chang'an University (3^{rd} Prize)	2019
Exemplary Individual of 2018 Summer Social Practice Activities of Chang'an University	2018