## **CURRICULUM VITAE**

## Wenlong Li

Ph.D. Student

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### RESEARCH INTERESTS

- Transportation Electrification
- Transportation System Optimization
- Transportation Network Modeling

### **EDUCATION**

## University at Buffalo, The State University of New York

Aug. 2025 — Present

Ph.D. Transportation Engineering

Advisor: Dr. Ziqi Song

## Beijing University of Technology

Sep. 2022 — Jun. 2025

M.Eng. Transportation Engineering (GPA:89.02/100)

Advisor: Dr. Zhengbing He

## East China Jiaotong University

Sep. 2018 — Jul. 2022

B.Eng. Transportation Engineering (GPA:3.99/5 Rank:1/70)

# ACADEMIC EXPERIENCE

#### Resilient optimization of battery electric bus system

Jun. 2025 — Present

Supervised by Dr. Ziqi Song

• Overview: Develops a resilient optimization framework for battery electric bus systems to ensure reliable and efficient operation under uncertainties in real-world disasters.

#### Robust optimization of electric bus systems

Apr. 2024 — Mar. 2025

• Overview: When optimizing electric bus systems, it's important to acknowledge that the remaining battery state of charge is uncertain in real-world scenarios due to unpredictable energy consumption. Developing a robust optimization model based on deterministic models is necessary, as it better aligns with practical applications.

## Integrated optimization of electric bus systems

Jul. 2022 — Aug. 2023

Supervised by Dr. Yi He and Prof. Zhengbing He

• Overview: Dynamic Wireless Charging (DWC) technology enables battery electric buses (BEBs) to charge in motion, extending the operational range of BEBs. In practical applications, the deployment of DWC facilities is a critical issue. Additionally, it's essential to consider optimal battery capacity and charging scheduling under time-of-use mechanisms for BEBs. Therefore, a comprehensive model is proposed for optimizing the deployment of DWC facilities within an electric bus system. The model is validated using actual bus routes from Beijing. The results illustrate that the integrated model reduces the overall cost by 10.98% compared to current research methods.

## **PUBLICATIONS**

# Journal Publications

1. **Li, W.**, He, Y., Hu, S., He, Z., Planning dynamic wireless charging infrastructure for battery electric bus systems with the joint optimization of charging scheduling, Transportation Research Part C, 159 (2024) 104469, 2024.

## Presentations & Posters

1. Li, W., He, Y., Hu, S., He, Z., Planning dynamic wireless charging infrastructure for battery electric bus systems with the joint optimization of charging scheduling, Transportation Research Board 103rd Annual Meeting (2024), Washington DC.

# **AWARDS**

- 2025.06 Outstanding Graduate Thesis Award, Beijing University of Technology
- 2024.10 National Graduate Student Scholarship, Beijing University of Technology
- 2024.06 First-Class Graduate Technological Innovation Award, Beijing University of Technology
- 2022.07 Outstanding Undergraduate Thesis Award, East China Jiaotong University

## **SKILLS**

- Language: Chinese (Native), English (IELTS: 6.5)
- Programming Language: GAMS, Julia, Python (numpy, pandas)
- Writting Tools: LATEX, Markdown
- Others: Visio, Vissim, AutoCAD, TransCAD, SketchUp

Updated October 28, 2025