The First INFORMS TSL Data-Driven Research Challenge (2024-2025 TSL-Meituan)

The INFORMS Transportation Science and Logistics Society (TSL) and Meituan, a platform offering location-based consumer products and services including entertainment, dining, delivery, travel, and more, are partnering to provide researchers and practitioners worldwide with access to Meituan's operational-level food delivery data in the first INFORMS TSL Data-Driven Research Challenge. This initiative aims to foster data-driven research on realworld challenges. Participants are expected to develop data-driven optimization models using the real data provided by Meituan, to address some of the suggested questions (see "Background and Data Description" on the data access page), or to explore questions of their interest.

Process

Eligibility Criteria: Who can participate?

- All researchers and practitioners worldwide are welcome to participate.
- INFORMS TSL members are encouraged to participate.
- Each participant may participate the research challenge by submitting at most one paper.

Judging Criteria: What will the judges be looking for?

All entries will be judged according to the following criteria.

- Data-driven.
- Potential impact on practice.
- Contribution to the research literature.
- Generalizability / Scalability of the proposed methodologies.

Timeline

- March 15, 2024: Launch of the research challenge.
- October 2024 (during the 2024 INFORMS Annual Meeting): TSL information session about the research challenge.
- March 15, 2025: Deadline for the research challenge submissions by participants.
- May 1, 2025: Review of submissions and selection of finalists by the judges.
- May 15, 2025: Presentation abstract submission deadline by the selected finalists. (Note that this is also the abstract submission deadline for the 2025 INFORMS Annual Meeting.)
- August 1, 2025: Registration deadline for final competition presentations in the 2025 INFORMS Annual Meeting by the selected finalists. (Note that this is also the speaker registration deadline for the 2025 INFORMS Annual Meeting.)
- October 2025 (during the 2025 INFORMS Annual Meeting): Finalist presentations, selection of winners by the judges, and announcement of the winner(s).

* The selected finalists will be invited for a Fast-Track submission to a Special Issue of Transportation Science on "Machine Learning, Analytics, and Optimization in Home Delivery Operations." Fast Track means that the paper will go through one round of review before making an approaching final decision, including a minor revision, conditional acceptance, rejection, or a recommendation for submission to general issues.

Guidelines

Data Access

- You can access the data from https://github.com/meituan/meituan_informs_data.
- The background and suggested research questions are included in the file "TSL-Meituan challenge_background and data" on the above data access page.

Submissions

- Before the submission deadline, participants can submit the paper to the Manuscript Central of Transportation Science and select "The First INFORMS TSL Data-Driven Research Challenge."
- Paper requirement: TS paper template.

Important Notes

- Participants, who download the data, can use this dataset solely for academic and research purposes and must not publicize or share the data through any other channels.
- Researchers may submit their papers that utilize the dataset associated with this research challenge to other journals or conferences only after the 2025 INFORMS Annual Meeting (i.e., after the final competition presentations) and only with proper acknowledgment to this research challenge.

Research Challenge Committees

Academic Committee

- Lei Zhao, Tsinghua University (co-chair)
- Hai Wang, Singapore Management University (co-chair)
- Ann Campbell, University of Iowa
- Jan Fabian Ehmke, University of Vienna
- Alexandre Jacquillat, Massachusetts Institute of Technology
- Ola Jabali, Politecnico di Milano
- Carolina Osorio, HEC Montréal
- Zhou Xu, Hong Kong Polytechnic University
- Other members in pending

<u>Meituan Committee</u>

- Renqing He
- Jinghua Hao
- Xuetao Ding
- Yile Liang
- Donghui Li
- Jiuxia Zhao