ISTRC Report on INFORMS General Meeting 2025

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With support from the ISTRC, I attended the INFORMS Annual Meeting for the first time and gave an invited 15–20 minute talk in the Freight Transportation session of the Transportation Science and Logistics track. The conference drew more than 6,000 participants.

My talk presented recent advances in line network design with handling times. The work studies how to route demand on line networks while accounting for congestion at nodes. The ideas apply to urban parcel delivery, passenger flows on bus and rail lines, and cargo handling in liner shipping. I showed that standard solvers often find good solutions quickly but rarely certify that those solutions are best. With a custom spatial branch-and-cut approach, we can prove optimality within minutes on instances where off-the-shelf tools remain inconclusive even after a week.

The talk and results were well received. I had a long follow-up conversation with a professor who saw an earlier version at TRISTAN XII three months ago, which the ISTRC also supported. It was rewarding to share how the project matured and to acknowledge ISTRC's role in making that progress possible. Because of the size and draw of the conference, INFORMS is also a great place to reconnect and meet new colleagues. I attended the UC Berkeley alumni night, since I completed my master's there, and caught up with several professors. I was especially glad to meet in person with a coauthor on a revenue-management paper after many months of working only on Zoom.

My sister and my twin brother are both at Georgia Tech in Industrial Engineering, as a postdoc and a PhD student. I visited the AI4Opt lab, met students and faculty working at the intersection of machine learning and optimization, and joined the Georgia Tech alumni night by invitation. I spoke with professors who study transportation systems and with others who work on challenging optimization topics such as nonseparable, nonconvex flow networks. Several ideas from those conversations are already influencing my current work. I also attended sessions across transportation, revenue management, and nonconvex optimization, and I am excited to apply those insights to the larger line-network design problem.

I am deeply grateful to the Israeli Smart Transportation Research Center for supporting my participation and presentation at INFORMS. With the Center's help, I was able to share meaningful progress with the transportation science community and build connections with U.S. researchers I rarely see at conferences in Europe or Asia. I strongly encourage future scholarship recipients to attend INFORMS and showcase the impactful research coming out of the ISTRC community to the broader transportation science field in the United States.

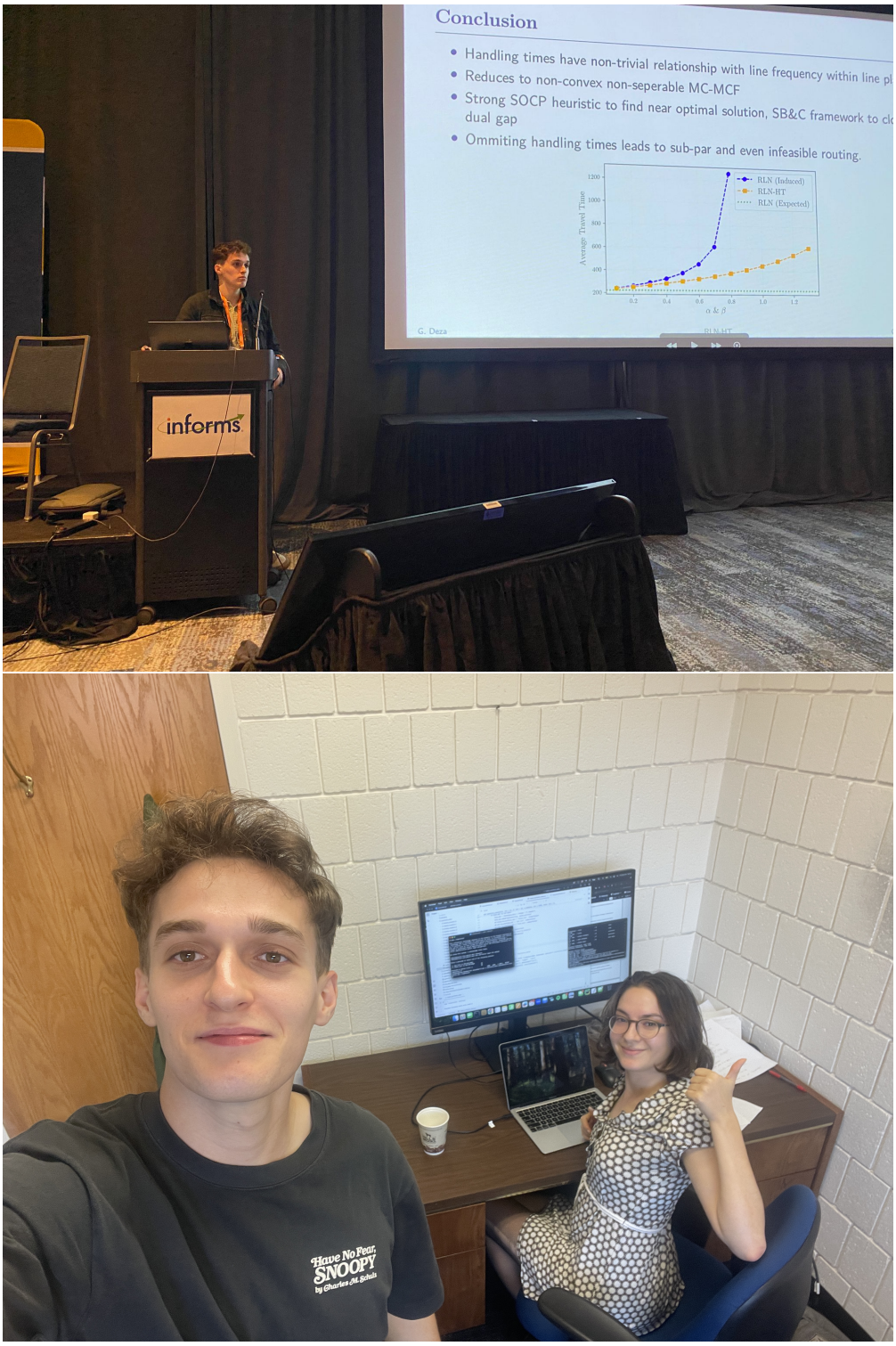

Figure 1: Top: End of my presentation, answering questions. Bottom: visiting my sister in her office, working and discussing research.