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Séminaire conjoint CRI2GS et CIRRELT

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Optimizing Freight Transport Through Intelligent Matchmaking under uncertainty

Abstract:
The transportation sector is actively adapting to meet growing demands for higher efficiency, profitability, and a lower environmental footprint. At the core of this trend are two-sided logistics platforms like Uber Freight, which facilitate interactions between shippers and carriers.
In our study, we address a digital platform for logistics service providers, defined as an integrated multi-stakeholder freight transportation system where the demand of *many* shippers (e.g., retailers, distributors, and manufacturers) are being matched to the capacity offer from *many* carriers (e.g., freight carriers, terminal managers and other logistics service providers) using *one* centralized intelligent decision support entity. From a system design perspective, this platform has a Many-to-One-to-Many structure, thus, we call this logistics platform an M1M system.
The intelligent platform matches the demand and supply sides together in an efficient way while satisfying the demand timely, respecting the operational restrictions and generating profit for carriers and the platform. We investigate the tactical planning required for M1M systems under uncertainty of demand volume and the capacity of service offers.
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Nadia is a Ph.D. candidate in the business administration program jointly offered by Université du Québec à Montréal (UQAM), McGill University, Concordia University, and HEC Montreal.

JOUR / DAY

Mardi / Tuesday 26 mars/March

13h00

Salle / Room DS-1525
Pavillon De Sève
UQAM

Ouvert à tous / Open to all

Organisatrice / Organiser

Ana María Anaya-Arenas

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