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**CONSOLIDATION-BASED MODELLING FOR THE
SCHEDULED SERVICE NETWORK DESIGN PROBLEM**

Abstract: We present a newly proposed modelling approach for optimizing the transportation of goods within a freight transportation network. Unlike classical modelling strategies, which measure vehicle capacity needs based on the flow of shipments on a time expanded network, this approach is based on explicit consolidations of shipments. Such an approach facilitates modelling multiple operational issues, including complicated loading constraints and piecewise linear cost functions. It also leads to a significantly stronger formulation of the problem, which can in turn be easier to solve than a formulation based on the classical approach.

About the speaker: Dr. Hewitt is a Professor of Supply Chain Management in the Quinlan School of Business at Loyola University Chicago. At Quinlan he holds the Ralph Marotta Endowed Chair of Free Enterprise and serves as the Faculty Director of its Supply Chain and Sustainability Center. His research includes developing quantitative models of decision-making processes found in the transportation and supply chain management domains, particularly in freight transportation. He has published over fifty articles documenting his research in journals such as INFORMS Journal on Computing, Operations Research, Transportation Research Part B, and Transportation Science. His work has won multiple prizes and assisted the decision-making of companies such as Bayer Crop Science, Exxon Mobil, Saia Motor Freight, Schneider, and Yellow Roadway. His research has been funded by agencies such as the National Science Foundation, the Material Handling Institute, and the New York State Health Foundation. He actively supports his profession through leadership roles in his professional society and serving on editorial boards at academic journals. Before entering the PhD program at Georgia Tech, Dr. Hewitt worked as a software engineer, contributing to the development of software to support consumer set-top boxes and LED signs in mass transit stations.

Lien zoom: <https://ulaval.zoom.us/j/62160547759?pwd=ZHIaS3BLNFB3SzRCaTg2OHhhZlZpQT09>

JEUDI / THURSDAY

22 juin / June 22nd

10h00

Pavillon Palasis-Prince

Local / Room

1307

Ouvert à tous

Open to all

Café et viennoiseries

Responsable / Organizer

Jean-François Côté