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UNIVERSITÉ LAVAL | Faculty of Business Administration
MobilOpt: Mobility Optimization

Séminaire conjoint CIRRELT / MobilOpt

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The Future of Mobility: From Gridlock to Green Solutions

Abstract: Research in the areas of mobility and sustainability in urban centers, especially those aimed at tangible measures such as optimization, brings real benefits to society, improving people's lives, protecting the environment and boosting the sustainable development of cities. We aim to create a more efficient, inclusive, and environmentally responsible urban environment. We will address three interconnected topics with a focus on developing practical and innovative solutions, aiming to improve urban mobility, promote sustainability, and improve the efficiency of urban centers.

1)Transportation of people: we highlight the importance of providing accessible and inclusive transportation. Optimization approaches for on-demand transportation systems will be presented, with a focus on the use of advanced technologies. We will discuss the integration of different modes of transport and the adaptability of routes.
2) Freight transport and its impacts on congestion and greenhouse gas emissions: we will discuss the challenges in transporting goods in urban centers and the environmental impacts arising from greenhouse gas emissions.
3) Optimization of traffic light phases to improve traffic and reduce fuel consumption: data analysis and simulation techniques applied to the optimization of traffic light phases will be explored, considering traffic patterns and real-time information. By reducing traffic jams, it is expected not only that traffic will flow more smoothly, but also that consumption and emissions will be significantly reduced.
Results of actual deployments will be presented to justify the efforts and potential gains of these projects.

Short Biography: Leandro C. Coelho is the Canada Research Chair in Integrated Logistics and a full professor at Université Laval. He specializes in industrial emissions reduction projects, particularly in the field of urban mobility, and his projects have saved several thousand tons of greenhouse gas emissions. He has published over 100 peer-reviewed scientific articles. He is a member of the College of New Scholars of the Royal Society of Canada and co-founder of the MobilOpt group on Mobility Optimization, which specializes in optimizing sustainable mobility and works closely with several cities, ministries and public transport providers.

https://uwaterloo.zoom.us/j/92832902291?pwd=rj6RY7JSvkdbc87AWS85Zx4QaxCPjm.1

Mercredi
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Université Laval
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Ouvert à tous
Café et viennoiseries

Responsable:
Maryam Darvish

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