

## Concordia Institute for Information Systems Engineering THE CONCORDIA INSTITUTE FOR INFORMATION SYSTEMS ENGINEERING IS PLEASED TO PRESENT THE FOLLOWING GUEST LECTURE IN OUR CIISE DISTINGUISHED SEMINAR SERIES

## Alfred Chu, Ph.D

Modeling and Analysis Agence Métropolitaine de Transport (AMT)

## The use of automatically collected data for public transit planning in Montréal

Public transit plays an important role in urban transportation. In order to assure the operations and planning of this complex and diverse system, information is critical. Data are collected and used to perform a variety of tasks and activities – performance monitoring, transport modeling, facility planning, passenger counting, revenue distribution, marketing, travel behavior study, etc. The transit industry used to be data poor and data collection costly. With the recent adoption of passive data collection devices such as the GPS and smart card automatic fare collection systems, along with the increase in computing power and the low cost of data storage, researchers and practitioners alike are looking for ways to better appropriate and exploit these rich data streams. Methodology to process archived passive data (with a special focus on smart card data) and examples of application are presented. Challenges and future directions will also be discussed.

**Biography**: Alfred Chu has recently obtained his Ph.D. at the École Polytechnique de Montréal in civil engineering specializing in transportation planning. He has an undergraduate degree in Geography and a Master of Urban Planning from McGill University. Currently, he works as a specialist – modeling & analysis in the Strategic Data and Metropolitan Affairs department at the Agence Métropolitaine de Transport (AMT) in Montréal. His works involve modeling transit network, revenue sharing of the regional integrated fare system, data collection and travel survey methods, and exploring the use of passive data streams (GPS, smart card automatic fare collection systems, etc.) to support transit operations and planning. His research interests are methodologies on smart card data processing for public transit planning and travel behavior studies.

