



Civil and  
Environmental  
Engineering

**C.C. MEI DISTINGUISHED  
SPEAKER SERIES 2017-18**



# Prof. Serge Hoogendoorn

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## Making Mobility Smart Again

### Abstract

**I**n many countries, cities are expanding in terms of size, number of residents and visitors, etc. The resulting increase in concentration of people, with their mobility needs, causes major traffic and transportation problems in and around our cities.

Next to the economic impacts due to delay and unreliability of travel time, concerns regarding safety and security, emissions and sustainability become more and more urgent.

Smart Mobility holds the potential to reduce these issues. In the lecture, we will show some examples of successful deployments and the traffic engineering principles that underlie these, for car traffic, but also for managing pedestrian flows and crowds, and even bicycles.

These recent examples show how current technology can be put to more effective use, but also how emergent technology can be effectively incorporated into the future.

That said, there are many uncertainties surrounding the development of Smart Mobility in the near and distant future. In this talk, we will show several scenarios along which the future may unfold toward a fully connected and automated situation. In doing so, we will identify different dilemmas which will be pivotal in how the situation will develop.

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# April 23, 2018

**Pre-lecture Reception: 4:30pm**

**Lecture: 5:00pm**

**Building 1-390**

Faculty Hosts:

Carolina Osorio + Lydia Bourouiba

### Biography

For over fifteen years, Prof. Serge Hoogendoorn has aspired to provide contributions in the fields of pedestrian and vehicular flow modelling, with special attention to data collection using innovative experimental and empirical methods. His current research focuses on furthering theories and methods to pedestrian and bicycle traffic and transport, involving advanced data collection, fusion, modelling, simulation, and active mode traffic management. Serge is a full professor of Traffic Operations & Management (since 2009) and a distinguished professor of Smart Urban Mobility (since 2016). He holds an honorary professorship from South-East University (Nanjing) since October 2013 and an honorary professorship position at Swinburne University (Melbourne). He is a member of the highly esteemed International Advisory Committee of the ISTTT, and of several committees of the US National Academies Transportation Research Board (one of which he is leading). Hoogendoorn has (co-) authored over 300 scientific publications.