THE HONG KONG
POLYTECHNIC UNIVERSITY
香港理工大學

Department of Computing
電 子 計 算 學 系

RESEARCH SEMINAR

Making the Most of Your Vehicle Trajectory Data: The Case of Routing

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Date : **5 May 2023 (Fri)**
Time : **2:30 pm - 3:30 pm**
Venue : **PQ304**

Abstract

The ongoing, sweeping digitalization of societal processes yields massive volumes of data that, if harnessed properly, hold the potential to enable value creation throughout society. Considering vehicle trajectory data, this talk puts focus on transportation: While we all depend on it for mobility, transportation has adverse effects on our productivity due to lack of predictability and congestion, on the climate due to greenhouse gas emissions, and on our health and safety due to air and noise pollution and accidents. In sum, it makes sense to invent techniques capable of exploiting as much as possible the information in trajectory data for the improvement of transportation.

The availability of massive trajectory data renders the traditional routing paradigm, where a road network is modeled as an edge-weighted graph, inadequate. Instead, new paradigms that thrive on massive trajectory data are called for. The talk will cover several such paradigms that aim to enable higher-accuracy routing.

About the Speaker

Prof. Christian S. JENSEN is Professor of Computer Science at Aalborg University, Denmark. His research concerns analytics, including machine learning, data mining, and query processing, and data management, with a focus on temporal and spatio-temporal data. Christian is an ACM and IEEE Fellow, and he is a member of Academia Europaea, the Royal Danish Academy of Sciences and Letters, and the Danish Academy of Technical Sciences. He has received several awards, most recently the 2022 ACM SIGMOD Contributions Award and the 2019 IEEE TCDE Impact Award.

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