Research outputs:

**Multi-Output Gaussian Processes for Crowdsourced Traffic Data Imputation**
Research output: Research - peer-review › Journal article – Annual report year: 2019

**Multi-output bus travel time prediction with convolutional LSTM neural network**
Petersen, N. C., Rodrigues, F. & Pereira, F. C. 15 Apr 2019 In : Expert Systems with Applications. 120, p. 426-435
Research output: Research - peer-review › Journal article – Annual report year: 2019

**Combining time-series and textual data for taxi demand prediction in event areas: a deep learning approach**
Rodrigues, F., Markou, I. & Pereira, F. C. 2019 In : Information Fusion. 49, p. 120-129
Research output: Research - peer-review › Journal article – Annual report year: 2019

**Comparison of Four Types of Artificial Neural Network and a Multinomial Logit Model for Travel Mode Choice Modeling**
Lee, D., Derrible, S. & Pereira, F. C. 2019 (Accepted/In press) In : Transportation Research Record.
Research output: Research - peer-review › Journal article – Annual report year: 2019

**Participating in environmental loyalty program with a real-time multimodal travel app: User needs, environmental and privacy motivators**
Research output: Research - peer-review › Journal article – Annual report year: 2019

**Scalable Population Synthesis with Deep Generative Modeling [arXiv]**
Research output: Research - peer-review › Journal article – Annual report year: 2019

**Active Learning for Input Space Exploration in Traffic Simulators**
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

**Activity Recognition for a Smartphone and Web-based Human Mobility Sensing System**
Research output: Research - peer-review › Journal article – Annual report year: 2018

**Deep Learning from Crowds**
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

**Efficient Transport Simulation With Restricted Batch-Mode Active Learning**
Heteroscedastic Gaussian processes for uncertainty modeling in large-scale crowdsourced traffic data

Just-in-Time Traffic Model Adaptation to Non-Recurrent Incidents

Opening Up the Conversation: Topic Modeling for Automated Text Analysis in Travel Surveys

Overview of traffic incident duration analysis and prediction
Li, R., Pereira, F. C. & Ben-Akiva, M. E. 2018 In : European Transport Research Review. 10, 2, 13 p., 22

Population Synthesis Meets Deep Generative Modelling

Real-Time Taxi Demand Prediction using data from the web

Social network analysis in future transportation systems: Contributions on observability, behaviour and structure

Towards Dynamic Bayesian Networks: State Augmentation for Online Calibration of DTA Systems

Traffic Prediction with Convolutional Long Short-Term Memory

A Bayesian Additive Model for Understanding Public Transport Usage in Special Events

Demand pattern analysis of taxi trip data for anomalies detection and explanation

Enabling Bus Transit Service Quality Co-Monitoring Through Smartphone-Based Platform
Li, C., Zegras, P. C., Zhao, F., Qin, Z., Shahid, A., Ben-Akiva, M., Pereira, F. C. & Zhao, J. 2017 In : Transportation Research Record. 2649, 1, p. 42-51
Enhancing Resilience to Disasters using Social Media
Research output: Research › Article in proceedings – Annual report year: 2018

Event characteristics that disrupt transport system's balance
Research output: Research › Paper – Annual report year: 2018

Learning Supervised Topic Models for Classification and Regression from Crowds
Research output: Research › Article in proceedings – Annual report year: 2017

Probabilistic Modeling and Visualization for Bankruptcy Prediction
Research output: Research › Article in proceedings – Annual report year: 2017

Use of Taxi-Trip Data In Analysis of Demand Patterns for Detection and Explanation of Anomalies
Research output: Research › Article in proceedings – Annual report year: 2017

Mapping Social Media for Transportation Studies
Research output: Research › Article in proceedings – Annual report year: 2016

Uncertainty in Bus Arival Time Predictions: Treating Heteroscedasticity With a Metamodel Approach
Research output: Research › Article in proceedings – Annual report year: 2016

DynaMIT2.0: architecture design and preliminary results on real-time data fusion for traffic prediction and crisis management
Research output: Research › Article in proceedings – Annual report year: 2015

Intelligent Transport Systems in the Smart City
Research output: Research › Conference abstract in proceedings – Annual report year: 2015

Projects:

Solution methods for predictive optimization
Gammelli, D., Pereira, F. C. & Pacino, D.
01/01/2019 → 31/12/2021
Project: PhD
Mining User Behaviour from Smartphone-data
Servizi, V., Pereira, F. C. & Nielsen, O. A.
01/11/2018 → 31/10/2021
Project: PhD

Traffic controlled by Air Quality - Organic City
Mikkelsen, T. N. & Pereira, F. C.
01/10/2017 → 31/03/2018
Project: Research

Autonomous Bus Demand Modeling from Big Data
Peled, I., Pereira, F. C. & Dauwels, J.
Samfinansieret - Andet
01/01/2018 → 31/12/2020
Project: PhD

Multi-model bus Arrival Prediction with Intelligent Handling of Uncertainties
Petersen, N. C., Pereira, F. C. & Heckscher, A.
Ansat ekstern
01/02/2017 → 30/01/2021
Project: PhD

Machine Learning and Mobility
Markou, I., Pereira, F. C. & Larsen, A.
Institut stipendie (DTU)
15/12/2015 → 14/12/2018
Project: PhD

ATIS and modal shift: the role and the effectiveness of information provision and perception
Mehdizadeh Dastjerdi, A., Pereira, F. C., Kaplan, S., Mabit, S. E., Cherchi, E. & Shiftan, Y.
Samfinansieret - Andet
15/12/2015 → 30/06/2019
Project: PhD

Intelligent Composition of Buffer Times in Railway Scheduling
Cerreto, F., Nielsen, O. A., Harrod, S., Pereira, F. C., Krasemann, J. T., Preston, J., Krasemann, J. T. & Preston, J.
Institut stipendie (DTU)
15/12/2014 → 06/09/2018
Project: PhD

Activities:

Projects for Mobility in the Smart City
Peled, I. (Organizer), Pereira, F. C. (Organizer)
1 Jun 2018 → 30 Jun 2018
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.