Research outputs:

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

**Multi-output bus travel time prediction with convolutional LSTM neural network**
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

**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: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

**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, In : Transportation Research Record. 2672, 49
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

**Factors driving the adoption of mobility-management travel app: a bayesian structural equation modelling analysis**
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2019 › Research › peer-review

**Online Framework for Demand-Responsive Stochastic Route Optimization**
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

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

**Predicting taxi demand hotspots using automated Internet Search Queries**
Markou, I., Kaiser, K. & Pereira, F. C., 2019, In : Transportation Research. Part C: Emerging Technologies. 102, p. 73-86
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

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

**Active Learning for Input Space Exploration in Traffic Simulators**
Antunes, F., Ribeiro, B. & Pereira, F. C., 2018, 2018 International Joint Conference on Neural Networks (IJCNN). IEEE, 8489302
Activity Recognition for a Smartphone and Web-based Human Mobility Sensing System

Deep Learning from Crowds

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

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
Research output: Contribution to conference › Poster – Annual report year: 2018 › Research › peer-review

A Bayesian Additive Model for Understanding Public Transport Usage in Special Events
Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

Demand pattern analysis of taxi trip data for anomalies detection and explanation
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2018 › Research › peer-review

Enabling Bus Transit Service Quality Co-Monitoring Through Smartphone-Based Platform
Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

Enhancing Resilience to Disasters using Social Media
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2018 › Research › peer-review

Event characteristics that disrupt transport system’s balance
Research output: Contribution to conference › Paper – Annual report year: 2018 › Research › peer-review

Learning Supervised Topic Models for Classification and Regression from Crowds
Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

Probabilistic Modeling and Visualization for Bankruptcy Prediction
Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

Use of Taxi-Trip Data in Analysis of Demand Patterns for Detection and Explanation of Anomalies
Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

Mapping Social Media for Transportation Studies
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review

Uncertainty in Bus Arrival Time Predictions: Treating Heteroscedasticity With a Metamodel Approach
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review
Using internet search queries to predict human mobility in social events
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2016 › Research › peer-review

DynaMIT2.0: architecture design and preliminary results on real-time data fusion for traffic prediction and crisis management
Research output: Chapter in Book/Report/Conference proceeding › Article in proceedings – Annual report year: 2015 › Research › peer-review

Intelligent Transport Systems in the Smart City
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 2015 › Research › peer-review

Projects:

**Machine Learning for Transportation Demand**
Garrido, S., Rich, J. & Pereira, F. C.
01/01/2019 → 31/12/2021
Project: PhD

**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 Predictinwith Intelligent Handling of Uncertainties**
Petersen, N. C., Pereira, F. C. & Heckscher, A.
Ansat eksternt
01/02/2017 → 30/01/2021
Project: PhD

**Machine Learning and Mobility**
Markou, I., Pereira, F. C., Larsen, A., Rich, J., Jenelius, E. A. & Viti, F.
Technical University of Denmark
15/12/2015 → 14/12/2018
**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.
Technical University of Denmark
15/12/2014 → 06/09/2018
Project: PhD

**Activities:**

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