Transport Modelling - DTU Orbit (11/06/2018)

Transport Modelling
Department of Management Engineering
Organisational unit: Section

Publications:

A framework for dynamic rescheduling problems
Publication: Research - peer-review › Journal article – Annual report year: 2018

Application of data clustering to railway delay pattern recognition
Publication: Research - peer-review › Journal article – Annual report year: 2018

Considering built environment and spatial correlation in modelling pedestrian injury severity
Publication: Research - peer-review › Journal article – Annual report year: 2018

Deep Learning from Crowds
Rodrigues, F. & Pereira, F. C. 2018
Publication: Research - peer-review › Paper – Annual report year: 2018

Effects of new bus and rail rapid transit systems – an international review
Ingvardson, J. B. & Nielsen, O. A. 2018 In : Transport Reviews. 38, 1, p. 96-116
Publication: Research - peer-review › Journal article – Annual report year: 2018

Environmental sustainable decision making – The need and obstacles for integration of LCA into decision analysis
Publication: Research - peer-review › Journal article – Annual report year: 2018

Evaluation of land-use and transport network effects on cyclists' route choices in the Copenhagen Region in value-of-distance space
Publication: Research - peer-review › Journal article – Annual report year: 2018

Factors of electric vehicle adoption: A comparison of conventional and electric car users based on an extended theory of planned behavior
Publication: Research - peer-review › Journal article – Annual report year: 2018

Output variability caused by random seeds in a multi-agent transport simulation model
Publication: Research - peer-review › Conference article – Annual report year: 2018

Passenger arrival and waiting time distributions dependent on train service frequency and station characteristics: A smart card data analysis
Publication: Research - peer-review › Journal article – Annual report year: 2018

Social network analysis in future transportation systems: Contributions on observability, behaviour and structure
Demand pattern analysis of taxi trip data for anomalies detection and explanation
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Dynamisk vejvalgsmodel for Hovedstadsområdet
Rasmussen, T. K., Paulsen, M. & Brun, B. 2017 In : Trafik & Veje. p. 45-47
Publication: Communication › Journal article – Annual report year: 2017

Effekten af autonome og selvkørende biler på kortere og lang sigt
Christensen, L. 2017 In : Trafik & Veje. 4 p.
Publication: Communication › Journal article – Annual report year: 2017

Empirical analyses of a choice model that captures ordering among attribute values
Mabit, S. L. 2017 In : Journal of Choice Modelling. 25, p. 3-10
Publication: Research - peer-review › Journal article – Annual report year: 2017

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

Enhancing Resilience to Disasters using Social Media
Publication: Research › Article in proceedings – Annual report year: 2018

Europæernes rejsevaner belyst igennem Ferie- og Forretningsrejseundersøgelserne
Publication: Research - peer-review › Conference article – Annual report year: 2017

Evaluating the police service quality for handling traffic crash reporting: A combined MCDA and LCA approach
Publication: Research - peer-review › Journal article – Annual report year: 2017

Event characteristics that disrupt transport system’s balance
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Harnessing big data for estimating the energy consumption and driving range of electric vehicles
Publication: Research - peer-review › Journal article – Annual report year: 2017

How indicative is a self-reported driving behaviour profile of police registered traffic law offences?
Publication: Research - peer-review › Journal article – Annual report year: 2016

Integrated Optimisation for Public Transport System with Joint Schedule- and Frequency-Based Services
Jiang, Y., Eltved, M., Nielsen, O. A. & Rasmussen, T. K. 2017
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2017
Integrating environmental impacts into cost-benefit analysis: The value of environmental pollutants
Dong, Y., Manzo, S. & Hauschild, M. Z. 2017
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2017

Integrating police reports with geographic information system resources for uncovering multidimensional patterns of pedestrian crashes in Denmark
Prato, C. G., Kaplan, S., Patrier, A. & Rasmussen, T. K. 2017
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2017

Investigating the reasons behind the intention to report cycling crashes to the police and hospitals in Denmark
Publication: Research - peer-review › Journal article – Annual report year: 2017

Joint modeling of schedule- and frequency-based services in public transport assignment models
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2017

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

Logical Entity Level Sentiment Analysis
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Modelling production-consumption flows of goods in Europe: the trade model within Transtools3
Publication: Research - peer-review › Journal article – Annual report year: 2017

Predicting the Potential Market for Electric Vehicles
Publication: Research - peer-review › Journal article – Annual report year: 2016

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

Road Safety Annual Report 2017
Publication: Research › Report – Annual report year: 2017

Road signage comprehension and overload: The role of driving style and need for closure
Bortei-Doku, S., Kaplan, S., Prato, C. G. & Nielsen, O. A. 2017 In : Transportation Research Procedia. 24, p. 442-449
Publication: Research - peer-review › Conference article – Annual report year: 2017

Strategic assessment of capacity consumption in railway networks: Framework and model
Publication: Research - peer-review › Journal article – Annual report year: 2017
Suitability of commercial transport for a shift to electric mobility with Denmark and Germany as use cases
Christensen, L., Klauenberg, J., Kveiborg, O. & Rudolph, C. 2017 In : Research in Transportation Economics. 64, 13 p.
Publication: Research - peer-review › Journal article – Annual report year: 2017

Testing the slope model of scheduling preferences on stated preference data
Publication: Research - peer-review › Journal article – Annual report year: 2017

The forming of truck platoons: How to make it work
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

The Recharging Infrastructure Needs for Long Distance Travel by Electric Vehicles: A Comparison of Battery-Switching and Quick-Charging Stations
Publication: Research - peer-review › Book chapter – Annual report year: 2017

The restricted stochastic user equilibrium with threshold model: Large-scale application and parameter testing
Publication: Research - peer-review › Journal article – Annual report year: 2017

The role of information systems in non-routine transit use of university students: Evidence from Brazil and Denmark
Publication: Research - peer-review › Journal article – Annual report year: 2017

The use of electric vehicles: A case study on adding an electric car to a household
Publication: Research - peer-review › Journal article – Annual report year: 2017

Threshold-based Stochastic User Equilibrium models
Watling, D. P., Rasmussen, T. K., Nielsen, O. A. & Prato, C. G. 2017
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2017

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

Accounting for the Theory of Planned Behaviour in departure time choice
Publication: Research - peer-review › Journal article – Annual report year: 2016

Bounded rational choice behaviour: applications in transport
Jensen, A. F. 2016 In : Transport Reviews. 36, 5, p. 680-681
Publication: Research - peer-review › Journal article – Annual report year: 2016

Mapping Social Media for Transportation Studies
Publication: Research - peer-review › Journal article – Annual report year: 2016
Mest trafiksikkerhed for pengene
Publication: Communication › Journal article – Annual report year: 2016

On the need for integrating LCA into decision making
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2016

Suitability of commercial transport for a shift to electric mobility
Publication: Research - peer-review › Conference article – Annual report year: 2017

The Danish national passenger model – Model specification and results
Publication: Research - peer-review › Journal article – Annual report year: 2016

Uncertainty in Bus Arrival Time Predictions: Treating Heteroscedasticity With a Metamodel Approach
Publication: Research - peer-review › Journal article – Annual report year: 2016

Understanding traffic crash under-reporting: Linking police and medical records to individual and crash characteristics
Publication: Research - peer-review › Journal article – Annual report year: 2016

Using internet search queries to predict human mobility in social events
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

What does the Tourism Demand Survey tell about long distance travel
Christensen, L. & Nielsen, O. A. 2016
Publication: Research - peer-review › Paper – Annual report year: 2017

Demand for long distance travel - a fast increasing but scarcely documented travel activity. Illustrated by Danish travel behaviour and compared with the other European analyses
Christensen, L. 2015
Publication: Research › Paper – Annual report year: 2015

Robustness indicators and capacity models for railway networks
Publication: Research › Ph.D. thesis – Annual report year: 2016

Projects:

Bedre Uheldsdata
Janstrup, K. H., Møller, M. & Clemmensen, M. B.
01/01/2016 → 01/11/2017
Project

Model til vurdering af infrastrukturredskærpå trafikuheld
Janstrup, K. H., Møller, M. & Pilegaard, N.
01/01/2016 → 31/12/2018
Project
Activities:

6th AAAI Conference on Human Computation and Crowdsourcing (HCOMP 2018) (Event)
Rodrigues, F. (Member)
5 Jul 2018 → 8 Jul 2018
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar

Bicycle accidents in Denmark – the contribution of cyclist behavior, the vehicle and the road
Møller, M. (Speaker), Janstrup, K. H. (Other), Pilegaard, N. (Other)
17 Apr 2018
Activity: Talks and presentations › Conference presentations

The road and its influence on bicycle accidents in Denmark
Janstrup, K. H. (Speaker), Møller, M. (Other), Pilegaard, N. (Other)
17 Apr 2018
Activity: Talks and presentations › Conference presentations

Influence of different crash characteristics on level of injury among cyclists
Janstrup, K. H. (Speaker), Møller, M. (Other)
8 Mar 2018
Activity: Talks and presentations › Conference presentations

Deep Learning from Crowds
Rodrigues, F. (Speaker)
2 Feb 2018 → 7 Feb 2018
Activity: Talks and presentations › Conference presentations

Erfaringer med supplerende uheldsdata i Danmark
Møller, M. (Speaker), Janstrup, K. H. (Other), Clemmensen, M. B. (Other)
31 Jan 2018
Activity: Talks and presentations › Talks and presentations in private or public companies and organisations

Vejen og omgivelsernes betydning for trafiksikkerheden
Janstrup, K. H. (Speaker)
31 Jan 2018
Activity: Talks and presentations › Talks and presentations in private or public companies and organisations

Workshop - Resultater fra spørgeskema
Janstrup, K. H. (Speaker), Møller, M. (Other), Pilegaard, N. (Other)
31 Jan 2018
Activity: Talks and presentations › Talks and presentations in private or public companies and organisations

Factors contributing to Bicycle accidents in Denmark - a study based on medical records
Møller, M. (Speaker), Janstrup, K. H. (Other)
10 Jan 2018
Activity: Talks and presentations › Conference presentations

Predicting for the adaptive transport system and other necessary ingredients for resilient urban mobility
Rodrigues, F. (Invited speaker)
15 Dec 2017
Activity: Talks and presentations › Guest lectures, external teaching and course activities at other universities

Integrated Optimisation for Public Transport System with Joint Schedule- and Frequency-based Services
Jiang, Y. (Speaker)
11 Dec 2017
Bedre uheldsdata
Janstrup, K. H. (Other), Møller, M. (Speaker), Clemmensen, M. B. (Other)
6 Dec 2017 → 7 Dec 2017
Activity: Talks and presentations › Conference presentations

Vejens skadespoint og trafiksikkerhed - Er der behov for et nyt skadespoint, som kan benyttes som trafiksikkerhedsindikator?
Janstrup, K. H. (Speaker), Møller, M. (Other), Pilegaard, N. (Other)
6 Dec 2017 → 7 Dec 2017
Activity: Talks and presentations › Conference presentations

31st Conference on Neural Information Processing Systems
Rodrigues, F. (Participant)
4 Dec 2017 → 9 Dec 2017
Activity: Attending an event › Participating in or organising a conference

Accident Analysis & Prevention (Journal)
Janstrup, K. H. (Reviewer)
15 Nov 2017 → ...
Activity: Research › Peer review of manuscripts

Asfaltindustriens valgmøde i Aarhus
Janstrup, K. H. (Invited speaker)
7 Nov 2017
Activity: Talks and presentations › Talks and presentations in private or public companies and organisations

Asfaltindustriens valgmøde i Guldborgsund
Janstrup, K. H. (Invited speaker)
1 Nov 2017
Activity: Talks and presentations › Talks and presentations in private or public companies and organisations

Asfaltindustriens valgmøde i Køge
Janstrup, K. H. (Invited speaker)
26 Oct 2017
Activity: Talks and presentations › Talks and presentations in private or public companies and organisations

Asfaltindustriens valgmøde i Odense
Janstrup, K. H. (Invited speaker)
25 Oct 2017
Activity: Talks and presentations › Talks and presentations in private or public companies and organisations

Network performance of autonomous cars at low market shares
Papu Carrone, A. V. (Speaker), Rich, J. (Other)
14 Sep 2017
Activity: Talks and presentations › Conference presentations

hEART 2017: 6th Symposium of the European Association for Research in Transportation
Paulsen, M. (Participant)
12 Sep 2017 → 14 Sep 2017
Activity: Attending an event › Participating in or organising a conference

Passenger arrival and waiting time distributions dependent on train service frequency and station characteristics: A smart card data analysis in Copenhagen
Ingvarsdson, J. B. (Guest lecturer)
Prediction Model Adaptation in Response to Traffic Disruptions
Peled, I. (Guest lecturer)
12 Sep 2017 → 14 Sep 2017
Activity: Talks and presentations › Conference presentations

MATSim User Meeting: Special Session @ hEART 2017
Paulsen, M. (Participant)
11 Sep 2017
Activity: Attending an event › Participating in or organising a conference

Stowage planning: A benchmark and a novel heuristic
Larsen, R. (Speaker)
6 Sep 2017
Activity: Talks and presentations › Conference presentations

Urban Rail Transit (Journal)
Cerreto, F. (Reviewer)
1 Sep 2017 → …
Activity: Research › Peer review of manuscripts

Joint Modelling of Schedule- and Frequency-based Services in Public Transport Assignment Models
Eltved, M. (Guest lecturer)
29 Aug 2017
Activity: Talks and presentations › Conference presentations

Cyklistuheld – hvilken betydning har vejen, køretøjet og trafikanten
Janstrup, K. H. (Speaker), Møller, M. (Other), Pilegaard, N. (Other)
28 Aug 2017 → 29 Aug 2017
Activity: Talks and presentations › Conference presentations

The influence of transit service frequency and station characteristics on passenger arrival time distributions: A smart card data analysis in the Greater Copenhagen Area
Ingvardson, J. B. (Guest lecturer)
28 Aug 2017 → 29 Aug 2017
Activity: Talks and presentations › Conference presentations

Integrating environmental impacts into cost-benefit analysis- The value of environmental pollutants
Dong, Y. (Speaker), Manzo, S. (Other), Hauschild, M. Z. (Other)
26 Jun 2017
Activity: Talks and presentations › Conference presentations

Integrating environmental impacts into cost-benefit analysis- The value of environmental pollutants
Dong, Y. (Guest lecturer), Manzo, S. (Guest lecturer), Hauschild, M. Z. (Guest lecturer)
25 Jun 2017 → 29 Jun 2017
Activity: Talks and presentations › Conference presentations

Samfundsøkonomiske konsekvenser af trafiksikkerhed
Janstrup, K. H. (Invited speaker)
14 Jun 2017
Activity: Talks and presentations › Talks and presentations in private or public companies and organisations

Trafiksikkerhed som grundlag for bedre prioritering af vejvedligehold
Janstrup, K. H. (Invited speaker)
Ambitiøse mål for trafiksikkerhed  
Janstrup, K. H. (Speaker)  
31 May 2017  
Activity: Talks and presentations › Conference presentations

Creating Ideal Railway Traffic in a Multi-Modal Simulation Universe  
Paulsen, M. (Speaker)  
31 May 2017  
Activity: Talks and presentations › Conference presentations

Understanding railway delays  
Cerreto, F. (Speaker)  
31 May 2017  
Activity: Talks and presentations › Conference presentations

Big Data Analysis in Railway Delays  
Cerreto, F. (Speaker)  
15 May 2017  
Activity: Talks and presentations › Conference presentations

Applying LCA in decision making- the need and the future perspective  
Dong, Y. (Speaker), Miraglia, S. (Other), Manzo, S. (Other), Georgiadis, S. (Other), Sørup, H. J. D. (Other), Boriani, E. (Other), Hald, T. (Other), Thøns, S. (Other), Hauschild, M. Z. (Other)  
10 May 2017  
Activity: Talks and presentations › Conference presentations

Applying LCA in decision making- the need and the future perspective  
Dong, Y. (Guest lecturer), Miraglia, S. (Guest lecturer), Manzo, S. (Guest lecturer), Georgiadis, S. (Guest lecturer), Sørup, H. J. D. (Guest lecturer), Boriani, E. (Guest lecturer), Hald, T. (Guest lecturer), Thøns, S. (Guest lecturer), Hauschild, M. Z. (Guest lecturer)  
7 May 2017 → 11 May 2017  
Activity: Talks and presentations › Conference presentations

Exposure group meeting - Walk21  
Janstrup, K. H. (Speaker)  
18 Apr 2017  
Activity: Talks and presentations › Talks and presentations in private or public companies and organisations

Integrating Life-cycle Assessment into Transport Cost-benefit Analysis  
Manzo, S. (Guest lecturer)  
18 Apr 2017 → 21 Apr 2017  
Activity: Talks and presentations › Conference presentations

Sammenhængen mellem vejenes tilstand, ulykker og samfundssøkonomi  
Janstrup, K. H. (Invited speaker)  
30 Mar 2017  
Activity: Talks and presentations › Talks and presentations in private or public companies and organisations

Mining historical delay data in railways  
Cerreto, F. (Guest lecturer)  
22 Feb 2017  
Activity: Talks and presentations › Conference presentations
The commuting habit loop: The role of satisfying existence, relatedness, and growth needs in modal choice
Ingvardson, J. B. (Guest lecturer)
10 Jan 2017
Activity: Talks and presentations › Conference presentations

Subcommity of AJB10 Long Distance and intercity Travel Joint Subcommity
Christensen, L. (Guest lecturer)
9 Jan 2017
Activity: Talks and presentations › Conference presentations

30th Annual Conference on Neural Information Processing Systems
Rodrigues, F. (Participant)
5 Dec 2016 → 10 Dec 2016
Activity: Attending an event › Participating in or organising a conference

Modelling production-consumption flows of goods in Europe: the trade model within Transtools 3
Gerard de Jong (Speaker), Reto Tanner (Other), Rich, J. (Other), Thorhauge, M. (Other), Nielsen, O. A. (Other), John Bates (Other)
5 Oct 2016
Activity: Talks and presentations › Conference presentations

Bus and Passenger Simulation within a Combined Agent-Based Multi-Modal Assignment Model
Paulsen, M. (Speaker), Rasmussen, T. K. (Other), Nielsen, O. A. (Guest lecturer)
16 Sep 2016
Activity: Talks and presentations › Conference presentations

A model for freight transport chain choice in Europe
Jensen, A. F. (Speaker), Thorhauge, M. (Other), Gerard de Jong (Speaker), Rich, J. (Other), Thijis Dekker (Other), Daniel Johnson (Other), Manuel Ojeda Cabral (Other), John Bates (Other), Nielsen, O. A. (Other)
14 Sep 2016 → 16 Sep 2016
Activity: Talks and presentations › Conference presentations

Evaluation of satisfaction and knowledge propagation in public transport
Ingvardson, J. B. (Guest lecturer)
14 Sep 2016
Activity: Talks and presentations › Conference presentations

Synthesis of household based trip diaries
Thorhauge, M. (Speaker), Rich, J. (Other)
14 Sep 2016
Activity: Talks and presentations › Conference presentations

The commuting habit loop: The role of satisfying existence, relatedness and growth needs in modal choice
Ingvardson, J. B. (Guest lecturer)
14 Sep 2016
Activity: Talks and presentations › Conference presentations

Workshop on Public Transport Modelling and Analytics
Paulsen, M. (Participant)
13 Sep 2016
Activity: Attending an event › Participating in or organising a conference

Udvikling af transportvanedata for husholdninger
Thorhauge, M. (Speaker), Rich, J. (Other)
23 Aug 2016
Activity: Talks and presentations › Conference presentations
Litteraturstudie af effekterne af BRT, letbaner og metro
Ingvardson, J. B. (Guest lecturer)
22 Aug 2016
Activity: Talks and presentations › Conference presentations

Effekter af højklasset kollektiv trafik og nærhed til standsningsstæder
Ingvardson, J. B. (Guest lecturer)
9 Jun 2016
Activity: Talks and presentations › Conference presentations

Fast robust solutions to stochastic VRPs using SIMD instructions
Larsen, R. (Speaker)
8 Jun 2016
Activity: Talks and presentations › Conference presentations

Kick Off for Transport DTU
Paulsen, M. (Participant)
1 Jun 2016
Activity: Attending an event › Participating in or organising a conference

Machine Learning for Transportation
Rodrigues, F. (Guest lecturer)
1 Jun 2016 → 3 Jun 2016
Activity: Talks and presentations › Guest lectures, external teaching and course activities at other universities

4th symposium arranged by European Association for Research in Transportation
Paulsen, M. (Participant)
9 Sep 2015 → 11 Sep 2015
Activity: Attending an event › Participating in or organising a conference

A meta-study on the significance of rail networks on public transport ridership
Ingvardson, J. B. (Guest lecturer)
9 Sep 2015
Activity: Talks and presentations › Conference presentations

Mesoscopic modelling of on-street public transport
Ingvardson, J. B. (Guest lecturer)
22 Jul 2015
Activity: Talks and presentations › Conference presentations

Stochastic and dynamic city logistics
Larsen, R. (Speaker)
8 Jun 2015
Activity: Talks and presentations › Conference presentations

A framework for solving stochastic vehicle routing problems in a dynamic setting using a deterministic solver
Larsen, R. (Speaker)
23 Jun 2014
Activity: Talks and presentations › Conference presentations

SafeTREC-UCTC Seminar: Departure time choice modeling
Thorhauge, M. (Speaker)
7 Feb 2014
Activity: Talks and presentations › Conference presentations
Prizes:

**DTU’s Young Researcher Award**
Kira Hyldekær Janstrup (Recipient), 30 Sep 2016
Prize: Prizes, scholarships, distinctions

**INFORMS Railway Application Section 2016 Student Paper Award - Second Place**
Fabrizio Cerreto (Recipient), Otto Anker Nielsen (Recipient) & Steven Harrod (Recipient), 13 Nov 2016
Prize: Prizes, scholarships, distinctions

**Prof. P.H. Bendtsens Transport Research Award**
Mikkel Thorhauge (Recipient), 22 Aug 2016
Prize: Prizes, scholarships, distinctions

**Third best paper and presentation at ECTRIFERSI Young Researchers Seminar**
Kira Hyldekær Janstrup (Recipient), 7 Jun 2013
Prize: Prizes, scholarships, distinctions

Press clippings:

**Dårlige veje i Odense kommune kan betyde flere uheld**
Kira Hyldekær Janstrup
25/10/2017
1 media contribution
Press / Media