Allan Larsen - DTU Orbit (23/04/2018)
Larsen, Allan
alar@dtu.dk
Department of Management Engineering - Professor, Group Leader
Management Science
Transport DTU
Operations Management

Publications:

A matheuristic for transfer synchronization through integrated timetabling and vehicle scheduling
Publication: Research - peer-review › Journal article – Annual report year: 2018

Electric bus fleet size and mix problem with optimization of charging infrastructure
Publication: Research - peer-review › Journal article – Annual report year: 2018

A matheuristic approach for solving the Integrated Timetabling and Vehicle Scheduling Problem
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2018

Phase-based Planning for Railway Infrastructure Projects
Publication: Research › Ph.D. thesis – Annual report year: 2018

The multi-port berth allocation problem with speed optimization and emission considerations
Venturini, G., Iris, C., Kontovas, C. A. & Larsen, A. 2017 In : Transportation Research. Part D: Transport & Environment. 54, p. 142-159
Publication: Research - peer-review › Journal article – Annual report year: 2017

Exact and Heuristic Methods for Integrated Container Terminal Problems
Publication: Research › Ph.D. thesis – Annual report year: 2017

An adaptive large neighborhood search heuristic for the Electric Vehicle Scheduling Problem
Publication: Research - peer-review › Journal article – Annual report year: 2016

Green corridors in freight logistics
Panagakos, G., Psarafitis, H. N. & Larsen, A. 2016 Technical University of Denmark (DTU).
Publication: Research › Ph.D. thesis – Annual report year: 2016

The Simultaneous Vehicle Scheduling and Passenger Service Problem with Flexible Dwell Times
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2016

Integrated Berth Allocation and Quay Crane Assignment Problem: Set partitioning models and computational results
Iris, C., Pacino, D., Rapke, S. & Larsen, A. 2015 In : Transportation Research. Part E: Logistics and Transportation Review. 81, p. 75-97
Publication: Research - peer-review › Journal article – Annual report year: 2015
Transportens Innovationsnetværk og nye tiltag indenfor transportsektoren
Publication: Communication › Journal article – Annual report year: 2015

Hybrid Heuristic Approaches for Tactical Berth Allocation Problem
Iris, C., Larsen, A., Pacino, D. & Røpke, S. 2014
Publication: Research › Conference abstract for conference – Annual report year: 2014

The Simultaneous Vehicle Scheduling and Passenger Service Problem
Petersen, H. L., Larsen, A., Madsen, O. B. G., Petersen, B. & Røpke, S. Nov 2013 In : Transportation Science. 47, 4, p. 603-616
Publication: Research - peer-review › Journal article – Annual report year: 2013

Improved Models to Integrated Berth Allocation-Quay Crane Assignment Problem: A Computational Comparison and Novel Solution Approaches
Iris, C., Pacino, D., Røpke, S. & Larsen, A. 2013
Publication: Research - peer-review › Paper – Annual report year: 2013

Integrated Berth Allocation-Quay Crane Assignment Problem: Reformulations, Improved Constraints and Computational Results
Iris, C., Røpke, S., Pacino, D. & Larsen, A. 2013
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2013

Optimering af kollektiv transport
Publication: Education › Book chapter – Annual report year: 2013

Routing of Electric Vehicles: Case Study of City Distribution in Copenhagen
Publication: Research › Conference abstract for conference – Annual report year: 2013

Routing of Electric Vehicles: City Distribution in Copenhagen
Publication: Research › Conference abstract for conference – Annual report year: 2013

The waste collection vehicle routing problem with time windows in a city logistics context
Publication: Research - peer-review › Conference article – Annual report year: 2012

Solving a Vehicle Routing Problem with a non-linear load dependant cost function
Spoorendonk, S., Larsen, A., Pisinger, D. & Røpke, S. 2011
Publication: Research › Conference abstract for conference – Annual report year: 2011

Truende mangel på trafikplanlæggere og vejingeniører
Publication: Communication › Journal article – Annual report year: 2011

Disruption Management - Foreword
Publication: Research - peer-review › Journal article – Annual report year: 2010

Disruption management in the airline industry-Concepts, models and methods
Publication: Research - peer-review › Journal article – Annual report year: 2010

The Simultaneous Vehicle Scheduling and Passenger Service Problem
Petersen, H. L., Larsen, A., Madsen, O. B. G. & Røpke, S. 2010

Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Intelligent Freight Transport Systems: Visions for real-time distribution planning
Overø, H. M., Larsen, A. & Røpke, S. 2009 16th ITS World Congress CD-ROM.

Publication: Research - peer-review › Article in proceedings – Annual report year: 2009

A Data Set for the Simultaneous Vehicle Scheduling and Passenger Service Problem

Publication: Research › Report – Annual report year: 2008

Dynamic Airline Scheduling: An Analysis of the Potentials of Refleeting and Retiming

Publication: Research - peer-review › Journal article – Annual report year: 2008

Dynamic Airline Scheduling: An Analysis of the Potentials of Refleeting and Retiming

Publication: Research - peer-review › Article in proceedings – Annual report year: 2008

Recent developments in dynamic vehicle routing systems

Publication: Research - peer-review › Book chapter – Annual report year: 2008

The Simultaneous Vehicle Scheduling and Passenger Service Problem

Publication: Research › Report – Annual report year: 2008

Airline Disruption Management - Perspectives, Experiences and Outlook

Publication: Research - peer-review › Journal article – Annual report year: 2007

Classification of Dynamic Vehicle Routing Systems

Publication: Research - peer-review › Book chapter – Annual report year: 2006

Dynamic Airline Scheduling: An Analysis of the Potentials of Refleeting and Retiming

Publication: Research › Report – Annual report year: 2007

Dynamic Airline Scheduling: An Analysis of the Potentials of Refleeting and Retiming

Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2007
Disruption management - operations research between planning and execution
Publication: Research › Report – Annual report year: 2001

The dynamic vehicle routing problem
Publication: Research › Ph.D. thesis – Annual report year: 2000

Partially Dynamic Vehicle Routing-Models and Algorithms
Larsen, A., Madsen, O. B. G. & Solomon, M. M. 1999
Publication: Research › peer-review › Report – Annual report year: 1999

The A-Priori Dynamic Travelling Salesman Problem with Time Windows
Publication: Research › peer-review › Report – Annual report year: 1999

Dynamic Vehicle Routing - An Overview of Systems with Varying Degree of Dynamism
Madsen, O. B. G. & Larsen, A. 1998 Proceeding of Tristan III.
Publication: Research › peer-review › Article in proceedings – Annual report year: 1998

Solving the multiple depot vehicle scheduling problem in a major Scandinavian city
Publication: Research › peer-review › Report – Annual report year: 1997

Solving the multiple depot vehicle scheduling problem in a major Scandinavian city
Publication: Research › peer-review › Article in proceedings – Annual report year: 1997

An Evaluation of the Strategy for Calling in Vehicles for Inspection.
Publication: Research › peer-review › Report – Annual report year: 1996

Computer based crew rostering (in Danish).
Larsen, A. & Madsen, O. B. G. 1996
Publication: Research › peer-review › Report – Annual report year: 1996

Projects:

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

Optimization of operations in public transportation
Farina, F., Røpke, S., Larsen, A. & Roberti, R.
01/10/2015 → 30/09/2018
Project: PhD

Optimization of timetables in integrated public transport planning
Fonseca, J. F. P., Larsen, A., Roberti, R. & Repke, S.
01/10/2015 → 30/09/2018
Project: PhD
Cargo-mix optimisation  
01/09/2014 → 01/02/2018  
Project: PhD

Green corridors in freight logistics  
15/08/2014 → 25/11/2016  
Project: PhD

Efficient Algorithms for integrated Container Terminal Activities  
Iris, C., Larsen, A., Pacino, D., Røpke, S., Psaraftis, H. N., Meisel, F. & Vis, I. F. A.  
01/02/2013 → 04/07/2016  
Project: PhD

The Framework of phase-based planning of railway  
Li, R., Larsen, A., Landex, A., Salling, K. B., Psaraftis, H. N., Preston, J. & Vicencio, A. A. N.  
15/01/2013 → 21/09/2017  
Project: PhD

ConCoord  
Olsen, A., Larsen, R., Larsen, A., Psaraftis, H. N. & Wen, M.  
01/01/2013 → 01/06/2016  
Project

Potential of Intelligent Electric Vehicles for Commercial Use  
Linde, E., Larsen, A., Røpke, S. & Wen, M.  
15/12/2012 → 31/08/2014  
Project: PhD

Network Effects within Railway Networks  
01/10/2012 → 07/04/2016  
Project: PhD

Green Corridor in the North Sea Region  
Olsen, A., Farina, F., Larsen, R. & Larsen, A.  
01/01/2012 → 31/12/2014  
Project

Disaggregate activity-based traffic assignment modelling  
01/05/2011 → 23/02/2015  
Project: PhD

Optimal Aircraft Gate Assignment on a Strategic, Tactical and Operational Level  
01/10/2010 → 26/05/2014  
Project: PhD

Effektive løsningsmetoder til real-tids distributionssystemer  
Buhrkal, K. F., Larsen, A. & Røpke, S.  
01/05/2010 → 31/03/2011  
Project: PhD
Sustainable Disruption Management
01/11/2009 → 04/04/2013
Project: PhD

Cable Aerodynamic Control
Kleissl, K., Georgakis, C. T., Koss, H., Fischer, G., Larose, G. & Larsen, A.
01/10/2009 → 27/08/2013
Project: PhD

Effektive løsningsmetoder til real-tids distributionssystemer
Kristiansen, H. M. O., Larsen, A. & Røpke, S.
01/10/2008 → 30/11/2009
Project: PhD

Solving Recovery Problems using Optimisations Methods
Rasmussen, M. S., Larsen, J., Ryan, D., Larsen, A., Gustafsson, T. & Rönnqvist, M.
01/05/2008 → 28/09/2011
Project: PhD

Models and Algorithms for the Vehicle Routing Problem with Cross Docking
Wen, M., Larsen, J., Clausen, J., Larsen, A., Hasle, G. & Nielsen, J. B.
01/02/2006 → 24/03/2010
Project: PhD

Simultaneous Optimisation of Operating Costs and Passenger Service in Public Transit
Madsen, O. B., Larsen, A., Pedersen, M. B. & Petersen, B.
01/09/2005 → 31/05/2008
Project

Traffic Plan for Greenland: Decision Support Tool TGB
06/06/2005 → 31/12/2005
Project

Centre for Logistics and Freight Transport
25/06/2001 → 31/12/2006
Project

The dynamic vehicle routing problem
Larsen, A., Madsen, O. B., Clausen, J., Gendreau, M. & Pisinger, D.
01/01/1997 → 17/04/2001
Project: PhD

Crew and vehicle scheduling.
Madsen, O. B. & Larsen, A.
01/01/1996 → 31/12/1998
Project

Calling in vehicles for inspection.
Madsen, O. B., Larsen, A. & Rygaard, J. M.
01/11/1995 → 31/05/1996
Project
Dynamic vehicle routing.
01/09/1994 → …
Project

Activities:

A matheuristic approach for Integrated Timetabling and Vehicle Scheduling Problem
Fonseca, J. F. P. (Speaker), Roberto Roberti (Other), van der Hurk, E. (Other), Larsen, A. (Guest lecturer)
17 May 2017
Activity: Talks and presentations › Conference presentations

City Logistics – constraints and opportunities. E-mobility and city logistics – for citizens, goods and business
Larsen, A. (Guest lecturer)
2 Feb 2017
Activity: Talks and presentations › Conference presentations