Jesper Larsen - DTU Orbit (25/12/2017)

Larsen, Jesper
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Department of Management Engineering - Professor/head of division
Management Science
Transport DTU
Operations Research

Publications:

**A Branch-and-Price algorithm for railway rolling stock rescheduling**
Publication: Research - peer-review › Journal article – Annual report year: 2017

**A Survey on Robustness in Railway Planning**
Publication: Research - peer-review › Journal article – Annual report year: 2017

**Considering passenger and operator inconvenience in the scheduling of large railway projects**
Publication: Research - peer-review › Journal article – Annual report year: 2017

**Integrated Rolling Stock Planning for Suburban Passenger Railways**
Publication: Research › Ph.D. thesis – Annual report year: 2017

**Tramp ship routing and scheduling with voyage separation requirements**
Publication: Research - peer-review › Journal article – Annual report year: 2017

**A Benders Decomposition-Based Mathuristic for the Cardinality Constrained Shift Design Problem**
Publication: Research - peer-review › Journal article – Annual report year: 2016

**A heuristic and hybrid method for the tank allocation problem in maritime bulk shipping**
Publication: Research - peer-review › Journal article – Annual report year: 2016

**Airport operations management**
Publication: Research - peer-review › Editorial – Annual report year: 2016

**An adaptive large neighborhood search procedure applied to the dynamic patient admission scheduling problem**
Lusby, R. M., Schwierz, M., Range, T. M. & Larsen, J. 2016 In : Artificial Intelligence in Medicine. 74, p. 21-31
Publication: Research - peer-review › Journal article – Annual report year: 2016

**An applied optimization based method for line planning to minimize travel time**
Publication: Research › Report – Annual report year: 2016
A new approach to the Container Positioning Problem
Publication: Research - peer-review › Journal article – Annual report year: 2015

Efficiency and Robustness in Railway Operations
Publication: Research › Ph.D. thesis – Annual report year: 2016

Finding equidistant nondominated points for biobjective mixed integer programs
Publication: Research › Report – Annual report year: 2016

Joint overbooking and seat allocation for fare families
Publication: Research - peer-review › Report – Annual report year: 2016

Planning of Midwives
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2017

A Benders decomposition-based Matheuristic for the Cardinality Constrained Shift Design Problem
Lusby, R. M., Larsen, J. & Range, T. M. 2015 University of Southern Denmark, Department of Business and Economics.
Publication: Research › Report – Annual report year: 2015

Aircraft Stand Allocation with Associated Resource Scheduling
Publication: Research - peer-review › Report – Annual report year: 2015

An integrated rolling stock planning model for the Copenhagen suburban passenger railway
Publication: Research - peer-review › Journal article – Annual report year: 2016

Publication: Research › Report – Annual report year: 2015

An optimization based method for line planning to minimize travel time
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Mitigation of airspace congestion impact on airline networks
Vaaben, B. V. & Larsen, J. 2015 In : Journal of Air Transport Management. 47, p. 54-65
Publication: Research - peer-review › Journal article – Annual report year: 2015

Reactive Robustness and Integrated Approaches for Railway Optimization Problems
Publication: Research › Ph.D. thesis – Annual report year: 2015
Simultaneously Recovering Rolling Stock Schedules and Depot Plans Under Disruption
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Solving the selective multi-category parallel-servicing problem
Publication: Research - peer-review › Journal article – Annual report year: 2013

Tramp Ship Routing and Scheduling - Models, Methods and Opportunities
Publication: Research › Report – Annual report year: 2015

A Branch-and-Price Framework for Railway Rolling Stock Rescheduling During Disruptions
Publication: Research › Report – Annual report year: 2014

A column generation approach for solving the patient admission scheduling problem
Publication: Research - peer-review › Journal article – Annual report year: 2013

A Heuristic and Hybrid Method for the Tank Allocation Problem in Maritime Bulk Shipping
Publication: Research › Report – Annual report year: 2014

A Heuristic and Hybrid Method for the Tank Allocation Problem in Maritime Bulk Shipping
Publication: Research › Report – Annual report year: 2014

A Hybrid Column Generation approach for an Industrial Waste Collection Routing Problem
Publication: Research - peer-review › Journal article – Annual report year: 2014

Allocation of Ground Handling Resources at Copenhagen Airport
Publication: Research › Ph.D. thesis – Annual report year: 2014

Room Allocation Optimisation at the Technical University of Denmark
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Tramp Ship Routing and Scheduling - Incorporating Additional Complexities
Publication: Research › Ph.D. thesis – Annual report year: 2015

Tramp ship routing and scheduling with integrated bunker optimization
Publication: Research - peer-review › Journal article – Annual report year: 2013
A Column Generation Approach for Solving the Patient Admission Scheduling Problem
Publication: Research › Report – Annual report year: 2013

A set packing inspired method for real-time junction train routing
Publication: Research - peer-review › Journal article – Annual report year: 2013

Routing and Scheduling in Tramp Shipping - Integrating Bunker Optimization
Vilhelmsen, C., Lusby, R. M. & Larsen, J. 2013
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2013

Publication: Research › Report – Annual report year: 2014

Solving the Selective Multi-Category Parallel-Servicing Problem
Range, T. M., Lusby, R. M. & Larsen, J. 2013 University of Southern Denmark, Department of Business and Economics. 27 p. (Discussion Papers on Business and Economics; No. 5/2013).
Publication: Research › Report – Annual report year: 2013

The Rolling Stock and Depot Recovery Problem
Publication: Research - peer-review › Paper – Annual report year: 2013

The Tank Allocation Problem in Bulk Shipping
Vilhelmsen, C., Lusby, R. M. & Larsen, J. 2013
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2013

A column generation-based heuristic for rostering with work patterns
Publication: Research - peer-review › Journal article – Annual report year: 2011

Sustainable Disruption Management
Publication: Research › Ph.D. thesis – Annual report year: 2012

The Home Care Crew Scheduling Problem: Preference-based visit clustering and temporal dependencies
Publication: Research - peer-review › Conference article – Annual report year: 2012

Optimisation-Based Solution Methods for Set Partitioning Models
Publication: Research › Ph.D. thesis – Annual report year: 2011

A multilevel variable neighborhood search heuristic for a practical vehicle routing and driver scheduling problem
Publication: Research - peer-review › Journal article – Annual report year: 2011

An IP Framework for the Crew Pairing Problem Using Subsequence Generation
Publication: Research › Report – Annual report year: 2011
Improved exact method for the double TSP with multiple stacks
Lusby, R. M. & Larsen, J. 2011 In : Networks. 58, 4, p. 290-300
Publication: Research - peer-review › Journal article – Annual report year: 2011

Models for the discrete berth allocation problem: A computational comparison
Publication: Research - peer-review › Journal article – Annual report year: 2011

Railway Track Allocation: Models and Methods
Publication: Research - peer-review › Journal article – Annual report year: 2010

Routing trains through railway junctions: A new set-packing approach
Lusby, R. M., Larsen, J., Ryan, D. & Ehr_gott, M. 2011 In : Transportation Science. 45, 2, p. 228-245
Publication: Research - peer-review › Journal article – Annual report year: 2011

Subsequence Generation for the Airline Crew Pairing Problem
Publication: Research › Report – Annual report year: 2011

The vehicle routing problem with time windows and temporal dependencies
Dohn, A. H., Rasmussen, M. S. & Larsen, J. 2011 In : Networks. 58, 4, p. 273-289
Publication: Research - peer-review › Journal article – Annual report year: 2011

Rostering and Task Scheduling: Applications in Manpower Planning
Publication: Research › Ph.D. thesis – Annual report year: 2010

Rich Vehicle Routing Problems and Applications
Publication: Research › Ph.D. thesis – Annual report year: 2010

An Exact Method for the Double TSP with Multiple Stacks
Publication: Research - peer-review › Journal article – Annual report year: 2010

An Integrated Approach to the Ground Crew Roster ing Problem with Work Patterns
Publication: Research › Report – Annual report year: 2010

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
Solving the Airline Crew Pairing Problem using Subsequence Generation
Publication: Research - peer-review › Article in proceedings – Annual report year: 2010

Solving the Airline Crew Pairing Problem using Subsequence Generation
Rasmussen, M. S., Lusby, R. M., Ryan, D. M. & Larsen, J. 2010
Publication: Research › Conference abstract for conference – Annual report year: 2010

The dynamic multi-period vehicle routing problem
Publication: Research - peer-review › Journal article – Annual report year: 2010

The Home Care Crew Scheduling Problem: Preference-Based Visit Clustering and Temporal Dependencies
Publication: Research › Report – Annual report year: 2010

Agent Based Individual Traffic Guidance
Publication: Research › Ph.D. thesis – Annual report year: 2009

Decision Support for the Rolling Stock Dispatcher
Publication: Research › Ph.D. thesis – Annual report year: 2009

A multi-level variable neighborhood search heuristic for a practical vehicle routing and driver scheduling problem
Publication: Research › Report – Annual report year: 2009

An Exact Method for the Double TSP with Multiple Stacks
Publication: Research - peer-review › Report – Annual report year: 2009

A Set Packing Inspired Method for Real-Time Junction Train Routing
Publication: Research › Report – Annual report year: 2009

Models for the Discrete Berth Allocation Problem: A Computational Comparison
Publication: Research › Report – Annual report year: 2009

Railway Track Allocation: Models and Methods
Publication: Research - peer-review › Report – Annual report year: 2009

Rolling Stock Recovery Problem
Solving the Airline Crew Pairing Problem using Subsequence Generation
Publication: Research - peer-review › Article in proceedings – Annual report year: 2010

The Dynamic Multi-Period Vehicle Routing Problem
Publication: Research - peer-review › Report – Annual report year: 2009

The Vehicle Routing Problem with Time Windows and Temporal Dependencies
Publication: Research - peer-review › Report – Annual report year: 2009

The Vehicle Routing Problem with Time Windows and Temporal Dependencies
Rasmussen, M. S., Dohn, A. H. & Larsen, J. 2009

Vehicle routing with cross-docking
Publication: Research - peer-review › Journal article – Annual report year: 2009

Green Wave Traffic Optimization - A Survey
Publication: Research › Report – Annual report year: 2008

The Home Care Crew Scheduling Problem
Publication: Research - peer-review › Article in proceedings – Annual report year: 2008

The Home Care Crew Scheduling Problem
Publication: Communication › Journal article – Annual report year: 2008

Airline Disruption Management - Perspectives, Experiences and Outlook
Publication: Research - peer-review › Journal article – Annual report year: 2007

A Hub Location Problem with Fully Interconnected Backbone and Access Networks
Publication: Research - peer-review › Journal article – Annual report year: 2007

Solving the Dial-a-Ride Problem using Genetic Algorithms
Publication: Research - peer-review › Journal article – Annual report year: 2007

On the vehicle routing problem with time windows
Publication: Research › Ph.D. thesis – Annual report year: 2006
Finding the best visualization of an ontology
Fabritius, C., Madsen, N., Clausen, J. & Larsen, J. 2006 In : Journal of the Operational Research Society. 57, 12, p. 1482-1490
Publication: Research - peer-review › Journal article – Annual report year: 2006

Forretningsviden + it + matematik = effektivitet
Publication: Communication › Journal article – Annual report year: 2006

Lagrangian duality applied to the vehicle routing problem with time windows
Publication: Research - peer-review › Journal article – Annual report year: 2006

Proceedings of the 1st Nordic Optimization Symposium - 10th Nordic MPS meeting, Copenhagen 2006
Publication: Research - peer-review › Report – Annual report year: 2006

Recent Advances in the Vehicle Routing Problem with Time Windows
Publication: Research - peer-review › Article in proceedings – Annual report year: 2006

Robustness and Recovery in Train Scheduling - a simulation study from DSB S-tog a/s
Publication: Research - peer-review › Report – Annual report year: 2006

Routing Trains Through Railway Junctions: A New Set Packing Approach
Lusby, R., Larsen, J., Ryan, D. & Ehrgott, M. 2006 Informatics and Mathematical Modelling, Technical University of Denmark, DTU.
Publication: Research - peer-review › Report – Annual report year: 2006

An exact algorithm for Aircraft Landing Problem
Wen, M., Larsen, J. & Clausen, J. 2005
Publication: Research - peer-review › Report – Annual report year: 2005

Disruption Management in the Airline Industry - Concepts, Models and Methods
Clausen, J., Larsen, A. & Larsen, J. 2005
Publication: Research - peer-review › Report – Annual report year: 2005

The Vehicle Routing Problem with Time Windows
Publication: Research - peer-review › Book chapter – Annual report year: 2005

Using Heuristics to Solve the Dedicated Aircraft Recovery Problem
Publication: Research - peer-review › Journal article – Annual report year: 2005
Airline Disruption Management - Perspectives, Experiences and Outlook
Publication: Research › Report – Annual report year: 2004

Finding the best visualization of an ontology
Fabritius, C. V., Madsen, N. L., Clausen, J. & Larsen, J. 2004
Publication: Research › Report – Annual report year: 2004

Refinements of the column generation process for the Vehicle Routing Problem with Time Windows
Publication: Research - peer-review › Journal article – Annual report year: 2004

Solving the Dial-a-Ride Problem using Genetic algorithms
Publication: Research › Report – Annual report year: 2004

BORNHOLM '02 - Nordic Summer Course on Applied Optimization and Modelling
Publication: Research › Book – Annual report year: 2002

Disruption Management for an Airline - Rescheduling of aircraft
Publication: Research - peer-review › Article in proceedings – Annual report year: 2002

Introduktion til Operationsanalyse
Larsen, J. 2002 In : ORbit : medlemsblad for Dansk Selskab for Operationsanalyse . 1, 1, p. 4-6
Publication: Communication › Journal article – Annual report year: 2002

Speeding up the solution process for the Vehicle Routing Problem with Time Windows using structural information
Larsen, J. 2002
Publication: Research › Report – Annual report year: 2002

Staff Scheduling within the Retail Business in Denmark
Publication: Research › Article in proceedings – Annual report year: 2002

Disruption management
Publication: Research › Journal article – Annual report year: 2001

Disruption management - operations research between planning and execution
Publication: Research › Report – Annual report year: 2001

Lagrangean Duality Applied on Vehicle Routing with Time Windows - Experimental Results
Publication: Research › Report – Annual report year: 2001

Using heuristics to solve the dedicated aircraft recovery problem
Leve, M., Sørensen, K. R., Larsen, J. & Clausen, J. 2001
Publication: Research › Report – Annual report year: 2001
Using Parallel Computers to solve the Vehicle Routing Problem with Time Windows
Larsen, J., Clausen, J. & Madsen, O. B. G. 2000 Informatics and Mathematical Modelling, Technical University of Denmark, DTU.
Publication: Research - peer-review › Report – Annual report year: 2000

Parallelization of the Vehicle Routing Problem with Time Windows
Publication: Research › Ph.D. thesis – Annual report year: 1999

Experiments with the auction algorithm for the shortest path problem
Publication: Research - peer-review › Journal article – Annual report year: 1999

Solutions to the Solomon Test-sets for the Vehicle Routing Problem with Time Windows
Publication: Research - peer-review › Report – Annual report year: 1999

Speeding up column generation in VRPTW
Publication: Research › Article in proceedings – Annual report year: 1999

A note on the practical performance of the auction algorithm for the shortest path
Larsen, J. 1998 In : Ricerca Operativa. 28, 87, p. 23-31
Publication: Research - peer-review › Journal article – Annual report year: 1998

A parallel approach to the stable marriage problem
Publication: Research › Article in proceedings – Annual report year: 1997

Projects:

Integrated optimization of vehicle and driver scheduling in public transport
01/01/2017 → 31/12/2019
Project: PhD

Managing Cyber Risk and Security in the Global Supply Chain
Sepúlveda Estay, D. A., Larsen, J., Khan, O., Oehmen, J., Urciuoli, L. & Wieland, A.
01/11/2014 → 31/10/2017
Project: PhD

Dynamic University Timetabling
Lindahl, M., Stidsen, T. J. R., Herold, M. B., Ho, S. C., Kristiansen, S., Sørensen, M., Larsen, J., Berghe, G. V. & Hasle, G.
01/02/2014 → 18/05/2017
Project: PhD

Robustness in Railway Planning
01/05/2013 → 01/09/2016
Project: PhD

Integrated Optimisation of Vehicle Ressources in Urban Rail Transport Systems
01/08/2012 → 23/03/2017
Integreret disponering/genopretning af togrift
Haahr, J. T., Pisinger, D., Larsen, J., Røpke, S., Borndörfer, R. & Huisman, D.
01/08/2012 → 11/12/2015
Project: PhD

Development of a Generic Performance Measurement Model in an Emergency Department
01/04/2012 → 18/06/2015
Project: PhD

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

Udvikling af optimieringsmodeller og løsningsmetoder til ruteplanlægning inden for trampfart
Vilhelmsen, C., Larsen, J., Pisinger, D., Andersson, H. & Oliveria, J. F. D.
01/01/2010 → 19/12/2014
Project: PhD

Sustainable Disruption Management
01/11/2009 → 04/04/2013
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

Model og Metoder for optimieringsproblemer med kombineret resourceplanlægning og skedulering
Dohn, A. H., Clausen, J., Larsen, J., Rönnqvist, M. & van den Akker, J. M.
01/12/2006 → 01/09/2010
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

Beslutningsstøtte til genopretning ved uregelmæssigheder i togrift
01/10/2005 → 22/04/2009
Project: PhD

Disruption Management i transportsektoren
Wanscher, J., Clausen, J., Larsen, J., Stidsen, T. J. R., Davidsson, P. & Liu, R.
01/04/2003 → 01/07/2009
Project: PhD

Ikke-differentiabel optimering i heltalsprogrammering
Kallehauge, B., Madsen, O. B., Larsen, J., Madsen, K., Nielsen, O. A., Lübbecke, M. & Pisinger, D.
01/08/2000 → 22/05/2006
Project: PhD
PARELLELIZATION OF THE VEHICLE ROUTING PROBLEM WITH TIME WINDOWS
Larsen, J. & Clausen, J.
01/01/1998 → 30/09/1999
Project: PhD

Vehicle routing with time windows.
Madsen, O. B., Larsen, J. & Clausen, J.
01/01/1996 → …
Project

Activities:

Tramp ship routing and scheduling with voyage separation requirements
Larsen, J. (Guest lecturer), Vilhelmsen, C. (Other), Lusby, R. M. (Other)
17 Jul 2017
Activity: Talks and presentations › Conference presentations

Planning of Midwives
Vilhelmsen, C. (Speaker), Larsen, J. (Other)
4 Jul 2016
Activity: Talks and presentations › Conference presentations

The 9th Triennial Symposium on Transportation Analysis (TRISTAN) (External organisation)
Larsen, J. (Participant)
12 Jun 2016
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar

OptALI Industry Day
Larsen, J. (Organizer)
1 Jun 2015 → 2 Jun 2015
Activity: Attending an event › Participating in or organising a conference