

Curriculum Vitae

Thomas J. K. Stidsen
Holsteinsgade, 16, 1.tv
DK-2100 København Ø

Date of birth: March 15, 1968
Place of birth: Birmingham, Great Britain
Nationality: Danish
Marital status: not married

Employment

Jan. 2008 – present Associate Professor in Operations Research, DTU-Management, Technical University of Denmark

Jan. 2006 – Dec. 2008 Associate Professor in Operations Research, Department of Informatics and Mathematical Modeling, Technical University of Denmark

Jan. 2003 – Dec. 2005 Assistant Professor in Operations Research, Department of Informatics and Mathematical Modeling, Technical University of Denmark

Sep. 2002 – Dec. 2002 Post Doc. in Operations Research, Department of Mathematics, University of Copenhagen

Feb. 1997 – May 1998 Research Assistant in Computer Science, Department of Computer Science, University of Aarhus

Education

Sep. 1989 – Jan. 1997 Studies in Computer Science at the University of Aarhus
Jan. 1997 Master in Computer Science

June 1999 – July 2002 PhD student at the Department of in Operations Research, Department of Informatics and Mathematical Modeling, Technical University of Denmark

PhD thesis *Optimisation problems in optical network design*
November 7, 2002 PhD defense

Languages

Danish Native speaker
English Read, speak and write fluently

Projects managed

FOOD-DTU Mathematical modelling of food during production and distribution

Scientific Publications (refereed)

- B. Jaumard, S. Sebbah, and T. Stidsen: *A Unified Modeling and Solution Framework for Pre-Planned Protection in Survivable WDM Networks*, submitted for "INFORMS Journal on Computing", 6/7 2009
- T. Stidsen, B. Petersen, K.B. Rasmussen, S. Spoorendonk, and M. Zachariasen: *Optimal Routing with Failure Independent Path Protection*, accepted for Networks, 19/12 2008, DOI: 10.1002/net.20323
- F. Solano, T. Stidsen, R. Fabregat, J. Marzo,: *Label Space Reduction in MPLS Networks: How Much Can A Single Stacked Label Do?*, in "IEEE/ACM Transactions on Networking", Vol. 16, Issue 6, pp. 1308-1320, 2008
- T. Thomadsen, and T. Stidsen: *The Generalized Fixed-Charge Network Design Problem*, in "Computers & Operations Research", Vol. 34, Issue 4, pp. 997-1007, 2007
- M. Stolpe, and T. Stidsen: *A hierarchical method for structural topology design problems with local stress and displacement constraints*, in "International Journal for Numerical Methods in Engineering", Vol. 69, Issue 5, pp. 1060-1084, 2007
- T. Stidsen and P. Kjærulff: *Complete rerouting protection*, in "Journal of Optical Networking", Vol. 5, Issue 6, pp. 481-492, 2006
- T. Thomadsen and T. Stidsen: *Hierarchical Ring Network Design Using Branch-and-Price*, in "Telecommunication Systems", 29(1), 61-76, 2005
- T. Stidsen and A. Glenstrup: *Quantifying optimal mesh and ring design costs*, in "Journal of Naval Reserach Logistics", 52(2), pp. 150-158, 2005
- H.M. Sigurdsson, S.E. Thorsteinsson and T. Stidsen: *Cost optimization methods in the design of next generation networks*, in "IEEE Communications Magazine", 42(9), pp. 118-122, 2004
- Z. Michalewicz, K. Deb, M. Schmidt and T. Stidsen: *Test-Case Generator for Nonlinear Continuous Parameter Optimization Techniques*, in "IEEE Transactions on Evolutionary Computation", vol. 4(3), pp. 197-215, 2000

Conferences/Workshops

- 2006 ICTON, Nottingham, Great Britain, Jun. 2006:
Optimal traffic grooming in WDM using lighttours
- Nordic MPS, Copenhagen, April. 2006,:
Shortcut Span Protection
- 2005 INOC, Lisboa, Mar. 2005:
The Generalized Fixed-Charge Network Design Problem
- 2004 Nordic MPS, Nrking, Oct. 2004:
Hub Location Network Design
- Informs Telecom, Boca Raton, Mar. 2004:
Optimal Allocation of P-Cycles
- 2003 DRCN, Banff, Oct. 2003,:
Optimizing Hierarchical Ring Networks
- 2002 IFORS, Edinburg, Jul. 2002,:
Routing and Wavelength Allocation
- Informs Telecom, Boca Raton, Mar. 2002,:
Routing and Dimensioning in Optical Ring Networks
- 2001 DRCN, Budapest, Oct. 2001,:
Optimal Placement of Wavelength Converting Nodes
- 2000 Networks, Toronto, Sep. 2000,:
Design Problems in Robust Optical Networks

Supervisor and Co-supervisor activities

- current Martin Wahl Andersen (Ph.D. project, co-supervised with Prof. Oli B. G. Madsen): *Container ship routing*
- Esben Friis-Jensen (Master Project): *Modelling of District Heating in Copenhagen*
- Morten Ødum (Master Project): *Sales distribution planning*
- 2008 Sune Pelle Binzer and Sune Høj Kjeldsen (Master Project): *Metaheuristics for High School Planning*
- Martin Lundberg-Jensen, Johan Musaeus Bruun and Jonas Ahmt (Diploma Project): *Task Assignment for High School Teachers*
- Bjarke Sandvei Jensen (Master Project): *Optimizing Application Mapping for Network-On-Chip Systems*
- Wei Zhang (Master Project, co-supervised with Bernd Dammann): *Parallel Branch and Bound*
- Morten Madsen (Diploma Project): *Investigation of a scheme for solving multi objective mixed integer problems*
- Christian Uldall Pedersen, Erik Schmidt Taarnhøj and Søren Vörts (Master Project): *Technician Routing and Scheduling*
- 2007 Christopher Härstedt Følsgaard and Anders Spælling (Diploma Project): *Sikring af kommunikationsnetværk ved brug af Single Backup Protection (in Danish)*
- 2006 Anders Nrrrelund and Allan Olsen (Master Project): *Optimization of Data Center Design*
- Liang Yao (Master Project): *Fixed-Charge Network Design and Protection Problems*
- 2005 Peter Kjærulff (Master Project): *Hardware, Software co-synthesis med genetiske multiobjektive algoritmer (in Danish)*
- Kasper Bonne Rasmussen (Master Project): *Optimization of Path Protection*
- Peter Klitz and Jesper Pedersen (Master Project): *Combined Production and Distribution Planning*
- Jesper Felstedt & Morten Middelboe Pedersen (Master Project): *Modellering af Investeringer i Elsektoren (in Danish)*
- Lars Bregnbæk (Master Project): *Natural Gas Supply in Denmark - A Model of Natural Gas Transmission and the Liberalized Gas Market*
- 2004 Rasmus Møller Lützhøft (Master Project, co-supervised with Jesper Larsen): *A set partitioning based heuristic for the VRPTW*
- Áslaug Sóley Bjarnadóttir (Master Project): *Solving the Vehicle Routing Problem with Genetic Algorithms*

Censored Ph.D. theses

- 2009 Jørgen Bundgaard Wanscher: *Agent Based Individual Traffic Guidance*, chairman of the Ph.D. evaluation committee, 3/2 2009
- Julie Jespersen Groth: *Decision Support for the Rolling Stock Dispatcher*, chairman of the Ph.D. evaluation committee, 30/1 2009
- 2008 Camilla Schaumburg-Muller: *Mathematical models and methods for analysis of distributed power generation on market conditions*, chairman of the Ph.D. evaluation committee, 11/6 2008
- 2007 Kourosch Marjani Rasmussen: *The mortgage choice problem*, chairman of the Ph.D. evaluation committee, 18/12 2007
- Lars Rosenberg Randleff: *Decision Support System for Fighter Pilots*, chairman of the Ph.D. evaluation committee, 30/8 2007

Teaching activities

2009	42133 Optimization using metaheuristics
	42132 Large Scale Optimization using Decomposition
	42112 Mathematical Programming with Modelling Software
2008	02719 Optimization using metaheuristics
	02717 Large Scale Optimization using Decomposition
	02709 Mathematical Programming with Modelling Software
2007	02719 Optimization using metaheuristics
	02717 Large Scale Optimization using Decomposition
	02709 Linear programming
2006	02715 Large Scale Optimization
	02709 Linear programming
2005	02715 Large Scale Optimization
	02709 Linear programming
2004	02715 Large Scale Optimization
	02709 Linear programming
2003	02715 Large Scale Optimization
	02737 Modeling and Optimization Using Excel