Dr. Lars Rohwedder

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Curriculum Vitae

Nationality	German	
Date of birth	July 1, 1991	
Research Interests	My research focuses mostly on algorithms in theoretical computer science. I am interested in combinatorial optimization, approximative and parameterized algorithms. Most of my work is connected to scheduling and (integer) linear programming.	
Academia	**Post-Doc** EPFL (Lausanne, Switzerland)	10/2019 - current
	Ph.D. University of Kiel (Kiel, Germany)	02/2016 - 09/2019
	M.Sc. (Computer Science) University of Kiel (Kiel, Germany)	03/2013 - 02/2016
	B.Sc (Computer Science) University of Kiel (Kiel, Germany)	10/2010 - 02/2013
Industry	**Research Assistant** VMWare (Palo Alto, USA)	04/2015 - 05/2015
	Research Assistant Oracle Labs (Redwood Shores, USA)	02/2014 - 04/2014
	Research Assistant Oracle Labs (Redwood Shores, USA)	03/2013 - 09/2013
Awards and Honors	I was admitted a scholarship by the Studienstiftung (German Academic Scholarship Foundation), a prestigious German organization that supports exceptionally talented students. I won the award for the best Ph.D. in the year 2019 by the "Förderverein der TF" of the University of Kiel. My Master's degree was among the three best (by grade) within the graduating class. My Bachelor's degree was the best (by grade).	
Other Activities	I have been in the program committee of WAOA'20 and I am regularly peer-reviewing for various conferences and journals. I contributed a significant part to the successful DFG (German research foundation) project proposal "Entwicklung von Approximationsalgorithmen für Scheduling auf heterogenen Maschinen" by my Ph.D. advisor Klaus Jansen.	

Publications

Lars Rohwedder, Andreas Wiese. *A (2+eps)-approximation algorithm for preemptive weighted flow time on a single machine.* preprint.

Etienne Bamas, Paritosh Garg, Lars Rohwedder. *The Submodular Santa Claus Problem in the Restricted Assignment Case.* preprint.

Moritz Buchem, Lars Rohwedder, Tjark Vredeveld, Andreas Wiese. *Additive Approximation Schemes for Load Balancing Problems.* preprint.

Jana Cslovjecsek, Friedrich Eisenbrand, Christoph Hunkenschröder, Lars Rohwedder, Robert Weismantel. *Block-Structured Integer and Linear Programming in Strongly Polynomial and Near Linear Time.* SODA'21.

Etienne Bamas, Andreas Maggiori, Lars Rohwedder, Ola Svensson. *Learning Augmented Energy Minimization via Speed Scaling.* NeurIPS'20.

Paritosh Garg, Sagar Kale, Lars Rohwedder, Ola Svensson. *Robust Algorithms under Adversarial Injections.* ICALP'20.

Lars Rohwedder. *Algorithms for Integer Programming and Allocation.* Ph.D. thesis.

Klaus Jansen, Alexandra Lassota, Lars Rohwedder. *Near-Linear Time Algorithm for n-fold ILPs via Color Coding.* ICALP'19 / SIAM J. Discrete Math'20.

Klaus Jansen, Lars Rohwedder. *Local Search Breaks 1.75 for Graph Balancing.* ICALP'19.

Marin Bougeret, Klaus Jansen, Michael Poss, Lars Rohwedder. *Approximation Results for Makespan Minimization with Budgeted Uncertainty.* WAOA'19.

Sebastian Berndt, Leah Epstein, Klaus Jansen, Asaf Levin, Marten Maack, Lars Rohwedder. *Online Bin Covering with Limited Migration.* ESA'19.

Klaus Jansen, Lars Rohwedder. *On Integer Programming, Discrepancy, and Convolution.* ITCS'18.

Klaus Jansen, Lars Rohwedder. *A Note on the Integrality Gap of the Configuration LP for Restricted Santa Claus.* Inf. Process. Lett.'20.

Klaus Jansen, Lars Rohwedder. *Compact LP Relaxations for Allocation Problems.* SOSA'18.

Klaus Jansen, Lars Rohwedder. *A Quasi-Polynomial Approximation for the Restricted Assignment Problem.* IPCO'17 / SIAM J. Comput.'20.

Klaus Jansen, Lars Rohwedder. *Structured Instances of Restricted Assignment with Two Processing Times.* CALDAM'17.

Klaus Jansen, Lars Rohwedder. *On the Configuration-LP of the Restricted Assignment Problem.* SODA'17.

Teaching Activities	**Approximation algorithms** - Teaching Assistant	Summer'19
	Introduction to operations research - Teaching Assistant	Winter'18/19
	Efficient algorithms - Teaching Assistant	Summer'18
	Introduction to operations research - Teaching Assistant	Winter'17/18
	Efficient algorithms - Teaching Assistant	Summer'17
	Introduction to operations research - Teaching Assistant	Winter'16/17
	Efficient algorithms - Teaching Assistant	Summer'16
	Theoretical computer science - Teaching Assistant	Winter'13/14
	Software engineering - Teaching Assistant	Winter'12/13
	Algorithms and data structures - Teaching Assistant	Summer'12
References	Available upon request	