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## Curriculum Vitae

Nationality	German
Date of birth	July 1, 1991
Research Interests	My goal is to devise algorithms that solve important problems efficiently. I am broadly interested in topics from combinatorial optimization including approximative algorithms, online algorithms, parameterized algorithms, and integer programming.
Academia	<b>Post-Doc</b> 10/2019 - ongoing EPFL (Lausanne, Switzerland)
	<b>Ph.D.</b> 02/2016 - 09/2019 University of Kiel (Kiel, Germany)
	<b>M.Sc. (Computer Science)</b> 03/2013 - 02/2016 University of Kiel (Kiel, Germany)
	<b>B.Sc (Computer Science)</b> 10/2010 - 02/2013 University of Kiel (Kiel, Germany)
Industry	<b>Research Assistant</b> 04/2015 - 06/2015 VMWare (Palo Alto, USA)
	<b>Research Assistant</b> 02/2014 - 04/2014 Oracle Labs (Redwood Shores, USA)
	<b>Research Assistant</b> 03/2013 - 09/2013 Oracle Labs (Redwood Shores, USA)
Awards and Honors	<ul style="list-style-type: none"> <li>► I was admitted a scholarship by the Studienstiftung (German Academic Scholarship Foundation), a prestigious German organization that supports exceptionally talented students.</li> <li>► I won the award for the best Ph.D. in the year 2019 by the “Förderverein der TF” of the University of Kiel.</li> <li>► My Master’s degree was among the three best (by grade) within the graduating class.</li> <li>► My Bachelor’s degree was the best (by grade).</li> </ul>
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

- [1] Xinrui Jia, Lars Rohwedder, Kshiteej Sheth, Ola Svensson. *Towards Non-Uniform  $k$ -Center with Constant Types of Radii*. SOSA'22.
- [2] Sebastian Berndt, Max A. Deppert, Klaus Jansen, Lars Rohwedder. *Load Balancing: The Long Road from Theory to Practice*. ALLENEX'22.
- [3] Etienne Bamas, Paritosh Garg, Lars Rohwedder. *The Submodular Santa Claus Problem in the Restricted Assignment Case*. ICALP'21.
- [4] Adam Polak, Lars Rohwedder, Karol Wegrzycki. *Knapsack and Subset Sum with Small Items*. ICALP'21.
- [5] Moritz Buchem, Lars Rohwedder, Tjark Vredeveld, Andreas Wiese. *Additive Approximation Schemes for Load Balancing Problems*. ICALP'21.
- [6] Lars Rohwedder, Andreas Wiese. *A  $(2+\epsilon)$ -approximation algorithm for preemptive weighted flow time on a single machine*. STOC'21.
- [7] Jana Cslovjecssek, Friedrich Eisenbrand, Christoph Hunkenschröder, Lars Rohwedder, Robert Weismantel. *Block-Structured Integer and Linear Programming in Strongly Polynomial and Near Linear Time*. SODA'21.
- [8] Etienne Bamas, Andreas Maggiori, Lars Rohwedder, Ola Svensson. *Learning Augmented Energy Minimization via Speed Scaling*. NeurIPS'20.
- [9] Paritosh Garg, Sagar Kale, Lars Rohwedder, Ola Svensson. *Robust Algorithms under Adversarial Injections*. ICALP'20.
- [10] Lars Rohwedder. *Algorithms for Integer Programming and Allocation*. Ph.D. thesis.
- [11] Klaus Jansen, Alexandra Lassota, Lars Rohwedder. *Near-Linear Time Algorithm for  $n$ -fold ILPs via Color Coding*. ICALP'19 / SIAM J. Discrete Math'20.
- [12] Klaus Jansen, Lars Rohwedder. *Local Search Breaks 1.75 for Graph Balancing*. ICALP'19.
- [13] Marin Bougeret, Klaus Jansen, Michael Poss, Lars Rohwedder. *Approximation Results for Makespan Minimization with Budgeted Uncertainty*. WAOA'19 / Theory Comput. Syst.'21.
- [14] Sebastian Berndt, Leah Epstein, Klaus Jansen, Asaf Levin, Marten Maack, Lars Rohwedder. *Online Bin Covering with Limited Migration*. ESA'19.
- [15] Klaus Jansen, Lars Rohwedder. *On Integer Programming, Discrepancy, and Convolution*. ITCS'18.
- [16] Klaus Jansen, Lars Rohwedder. *A Note on the Integrality Gap of the Configuration LP for Restricted Santa Claus*. Inf. Process. Lett.'20.
- [17] Klaus Jansen, Lars Rohwedder. *Compact LP Relaxations for Allocation Problems*. SOSA'18.
- [18] Klaus Jansen, Lars Rohwedder. *A Quasi-Polynomial Approximation for the Restricted Assignment Problem*. IPCO'17 / SIAM J. Comput.'20.

- [19] Klaus Jansen, Lars Rohwedder. *Structured Instances of Restricted Assignment with Two Processing Times*. CALDAM'17.
- [20] Klaus Jansen, Lars Rohwedder. *On the Configuration-LP of the Restricted Assignment Problem*. SODA'17.

Teaching Activities	<b>Algorithms (EPFL)</b>	Teaching Assistant	Fall'21
	<b>Approximation Algorithms (Kiel)</b>	Teaching Assistant	Summer'19
	<b>Bachelor's thesis (Kiel)</b>	Co-Advisor	Winter'18/19
	<i>Fast Approximation Algorithms for Scheduling via Discrepancy and FFT</i>		
	<b>Introduction to Operations Research (Kiel)</b>	Teaching Assistant	Winter'18/19
	<b>Efficient Algorithms (Kiel)</b>	Teaching Assistant	Summer'18
	<b>Introduction to Operations Research (Kiel)</b>	Teaching Assistant	Winter'17/18
	<b>Master's thesis (Kiel)</b>	Co-Advisor	Summer'17
	<i>Experimental Comparison of Theoretical Algorithms for FVS</i>		
	<b>Efficient Algorithms (Kiel)</b>	Teaching Assistant	Summer'17
	<b>Bachelor's thesis (Kiel)</b>	Co-Advisor	Winter'16/17
	<i>Local Search for the Restricted Assignment Problem</i>		
	<b>Introduction to Operations Research (Kiel)</b>	Teaching Assistant	Winter'16/17
	<b>Efficient Algorithms (Kiel)</b>	Teaching Assistant	Summer'16
References	<b>Theoretical Computer Science (Kiel)</b>	Teaching Assistant	Winter'13/14
	<b>Software Engineering (Kiel)</b>	Teaching Assistant	Winter'12/13
	<b>Algorithms and Data Structures (Kiel)</b>	Teaching Assistant	Summer'12
	Available upon request		