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## **Curriculum Vitae**

Nationality	German		
Date of birth	July 1, 1991		
Research Interests	My research focuses 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	10/2019 - ongoing	
	EPFL (Lausanne, Switzerland)		
	Ph.D.	02/2016 - 09/2019	
	University of Kiel (Kiel, Germany)		
	M.Sc. (Computer Science)	03/2013 - 02/2016	
	University of Kiel (Kiel, Germany)		
	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	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).

Oracle Labs (Redwood Shores, USA)

## 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] 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.
- [2] Lars Rohwedder, Andreas Wiese. A (2+eps)-approximation algorithm for preemptive weighted flow time on a single machine. preprint.
- [3] Etienne Bamas, Paritosh Garg, Lars Rohwedder. *The Submodular Santa Claus Problem in the Restricted Assignment Case.* preprint.
- [4] Etienne Bamas, Andreas Maggiori, Lars Rohwedder, Ola Svensson. Learning Augmented Energy Minimization via Speed Scaling. NeurIPS'20.
- [5] Moritz Buchem, Lars Rohwedder, Tjark Vredeveld, Andreas Wiese. *Additive Approximation Schemes for Load Balancing Problems*. preprint.
- [6] Paritosh Garg, Sagar Kale, Lars Rohwedder, Ola Svensson. *Robust Algorithms under Adversarial Injections*. ICALP'20.
- [7] Lars Rohwedder. *Algorithms for Integer Programming and Allocation*. Ph.D. thesis.
- [8] Klaus Jansen, Alexandra Lassota, Lars Rohwedder. *Near-Linear Time Algorithm for n-fold ILPs via Color Coding*. ICALP'19 / SIAM J. Discrete Math'20.
- [9] Klaus Jansen, Lars Rohwedder. *Local Search Breaks 1.75 for Graph Balancing.* ICALP'19.
- [10] Marin Bougeret, Klaus Jansen, Michael Poss, Lars Rohwedder. *Approximation Results for Makespan Minimization with Budgeted Uncertainty*. WAOA'19.
- [11] Sebastian Berndt, Leah Epstein, Klaus Jansen, Asaf Levin, Marten Maack, Lars Rohwedder. *Online Bin Covering with Limited Migration*. ESA'19.
- [12] Klaus Jansen, Lars Rohwedder. *On Integer Programming, Discrepancy, and Convolution.* ITCS'18.
- [13] Klaus Jansen, Lars Rohwedder. A Note on the Integrality Gap of the Configuration LP for Restricted Santa Claus. Inf. Process. Lett.'20.
- [14] Klaus Jansen, Lars Rohwedder. *Compact LP Relaxations for Allocation Problems*. SOSA'18.
- [15] Klaus Jansen, Lars Rohwedder. A Quasi-Polynomial Approximation for the Restricted Assignment Problem. IPCO'17 / SIAM J. Comput.'20.
- [16] Klaus Jansen, Lars Rohwedder. Structured Instances of Restricted Assignment with Two Processing Times. CALDAM'17.
- [17] Klaus Jansen, Lars Rohwedder. *On the Configuration-LP of the Restricted Assignment Problem.* SODA'17.

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