

Phone: +41 21 693 5219  
 Email: [lars.rohwedder@epfl.ch](mailto:lars.rohwedder@epfl.ch)  
 Url: <https://www.larsrohwedder.com>

EPFL INJ 131  
 Station 14  
 CH-1015 Lausanne

## 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	<table> <tr> <td><b>Post-Doc</b> EPFL (Lausanne, Switzerland)</td><td>10/2019 - ongoing</td></tr> <tr> <td><b>Ph.D.</b> University of Kiel (Kiel, Germany)</td><td>02/2016 - 09/2019</td></tr> <tr> <td><b>M.Sc. (Computer Science)</b> University of Kiel (Kiel, Germany)</td><td>03/2013 - 02/2016</td></tr> <tr> <td><b>B.Sc (Computer Science)</b> University of Kiel (Kiel, Germany)</td><td>10/2010 - 02/2013</td></tr> </table>	<b>Post-Doc</b> EPFL (Lausanne, Switzerland)	10/2019 - ongoing	<b>Ph.D.</b> University of Kiel (Kiel, Germany)	02/2016 - 09/2019	<b>M.Sc. (Computer Science)</b> University of Kiel (Kiel, Germany)	03/2013 - 02/2016	<b>B.Sc (Computer Science)</b> University of Kiel (Kiel, Germany)	10/2010 - 02/2013
<b>Post-Doc</b> EPFL (Lausanne, Switzerland)	10/2019 - ongoing								
<b>Ph.D.</b> University of Kiel (Kiel, Germany)	02/2016 - 09/2019								
<b>M.Sc. (Computer Science)</b> University of Kiel (Kiel, Germany)	03/2013 - 02/2016								
<b>B.Sc (Computer Science)</b> University of Kiel (Kiel, Germany)	10/2010 - 02/2013								
Industry	<table> <tr> <td><b>Research Assistant</b> VMWare (Palo Alto, USA)</td><td>04/2015 - 06/2015</td></tr> <tr> <td><b>Research Assistant</b> Oracle Labs (Redwood Shores, USA)</td><td>02/2014 - 04/2014</td></tr> <tr> <td><b>Research Assistant</b> Oracle Labs (Redwood Shores, USA)</td><td>03/2013 - 09/2013</td></tr> </table>	<b>Research Assistant</b> VMWare (Palo Alto, USA)	04/2015 - 06/2015	<b>Research Assistant</b> Oracle Labs (Redwood Shores, USA)	02/2014 - 04/2014	<b>Research Assistant</b> Oracle Labs (Redwood Shores, USA)	03/2013 - 09/2013		
<b>Research Assistant</b> VMWare (Palo Alto, USA)	04/2015 - 06/2015								
<b>Research Assistant</b> Oracle Labs (Redwood Shores, USA)	02/2014 - 04/2014								
<b>Research Assistant</b> Oracle Labs (Redwood Shores, USA)	03/2013 - 09/2013								
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] Lars Rohwedder, Andreas Wiese. *A  $(2+\epsilon)$ -approximation algorithm for preemptive weighted flow time on a single machine*. STOC'21.
- [2] 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.
- [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 Activities	<b>Approximation Algorithms</b>	Teaching Assistant	Summer'19
	<b>Bachelor's thesis</b>	Co-Advisor	Winter'18/19
	<i>Fast Approximation Algorithms for Scheduling via Discrepancy and FFT</i>		
	<b>Introduction to Operations Research</b>	Teaching Assistant	Winter'18/19
	<b>Efficient Algorithms</b>	Teaching Assistant	Summer'18
	<b>Introduction to Operations Research</b>	Teaching Assistant	Winter'17/18
	<b>Master's thesis</b>	Co-Advisor	Summer'17
	<i>Experimental Comparison of Theoretical Algorithms for FVS</i>		
	<b>Efficient Algorithms</b>	Teaching Assistant	Summer'17
	<b>Bachelor's thesis</b>	Co-Advisor	Winter'16/17
	<i>Local Search for the Restricted Assignment Problem</i>		
	<b>Introduction to Operations Research</b>	Teaching Assistant	Winter'16/17
	<b>Efficient Algorithms</b>	Teaching Assistant	Summer'16
	<b>Theoretical Computer Science</b>	Teaching Assistant	Winter'13/14
	<b>Software Engineering</b>	Teaching Assistant	Winter'12/13
	<b>Algorithms and Data Structures</b>	Teaching Assistant	Summer'12
References	Available upon request		