

# Andy Oertel

M. Sc.

Stora Södergatan 14  
22223 Lund, Sweden  
✉ andy.oertel@cs.lth.se

## Personal Information

Date of Birth Oktober 31, 1996  
Place of Birth Zschopau, Germany

## Experience

- 2021-11 – today **PhD student**, *Lund University*.  
Topic: New, efficient and certifiable combinatorial optimization solver methods
- 2020-10 – 2021-11 **Research Assistant**, *Chemnitz University of Technology*.  
CRC Hybrid Societies  
Processing and Analysis of time series data through Methods on Graphs
- 2019-11 – 2021-03 **Tutor**, *Chemnitz University of Technology*.  
Courses: Theoretical Computer Science 1, Introduction to Quantum Computing, Distributed Algorithms
- 2018-10 – 2019-06 **Research Assistant**, *Chemnitz University of Technology*.  
Young Researchers Group SyNErgIt - Synergetische Nutzung von Energie- und Informationstechnik  
Development of own Methods to round Solutions of Optimization Programs
- 2018-07 – 2018-09 **Undergraduate Assistant**, *Chemnitz University of Technology*.  
Young Researchers Group SyNErgIt - Synergetische Nutzung von Energie- und Informationstechnik  
Implementation of known Methods to round Solutions of Optimization Programs

## Education

- 2021-11 – today **PhD student in Computer Science**, Lund University.
- 2018-10 – 2021-05 **Master of Science in Computer Science**, Chemnitz University of Technology.  
Grade: 1.3 (very good)
- 2015-10 – 2018-07 **Bachelor of Science in Computer Science**, Chemnitz University of Technology.  
Grade: 1.2 (very good)
- 2007 – 2015 **Abitur**, Gymnasium Zschopau.

## Awards

- 2021 University Award of the Department for Computer Science for my Master's thesis as best Master/PhD thesis 2021

2022 Best Paper Award at SAT 2022 for the paper **Certified CNF Translations for Pseudo-Boolean Solving**

---

## Publications

- 2022 Stephan Gocht, Ruben Martins, Jakob Nordström and *Andy Oertel*, **Certified CNF Translations for Pseudo-Boolean Solving**, 25th International Conference on Theory and Applications of Satisfiability Testing (SAT 2022), Leibniz International Proceedings in Informatics (LIPIcs)
- 2021 Josefran de O. Bastos, Hanno Lefmann, Carlos Hoppen, *Andy Oertel* and Dionatan R. Schmidt, **Maximum Number of  $r$ -Edge-Colorings Such That All Copies of  $K_k$  Are Rainbow**, *Procedia Computer Science*
- In review Tobias Hofmann and *Andy Oertel*, **Fast Ultrametric Matrix-Vector Multiplication**
- In review Josefran de O. Bastos, Hanno Lefmann, Carlos Hoppen, *Andy Oertel* and Dionatan R. Schmidt, **Graphs With Many Edge-Colorings Such That Complete Graphs Are Rainbow**

---

## Language Skills

- German Native Language  
English fluent in spoken and written

---

## Further Information

- 2019-11 Research trip to UFRGS Porto Alegre, Brazil, Funded by German Academic Exchange Service (DAAD)
- 2017 – 2021 Organizer of Chemnitzer Spielenacht (tabletop game event)  
Latin (Latinum)