



Tobias Hofmann

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Personal Information

Address Schulplatz 1
08340 Schwarzenberg
Date of Birth March 1, 1989
Place of Birth Erlabrunn, Germany

Professional Experiences

2015|09 – today **Doctoral Researcher** at the Chair of Algorithmic and Discrete Mathematics,
Faculty of Mathematics, Chemnitz University of Technology
2018|04 – 2020|03 **Lecturer**,
TUCed – An-Institut für Transfer und Weiterbildung GmbH
2014|10 – 2015|08 **Sales Consultant and Research Trainee**,
prudsys AG
2014|10 – 2015|03 **Teaching Assistant** at the Chair of Harmonic Analysis and Operator Theory,
Faculty of Mathematics, Chemnitz University of Technology
2011|10 – 2015|03 **Teaching Positions** at the Chair of Public Finance and Chair of Economic Policy,
Faculty of Economics and Business Administration, Chemnitz University of Technology
2012|01 – 2013|12 **Research Assistant** at the Chair of Economic Policy,
Faculty of Economics and Business Administration, Chemnitz University of Technology

Education

2014|06 – 2018|09 **Mathematics**, Bachelor of Science,
Specialization in Pure Mathematics and Combinatorial Optimization,
Chemnitz University of Technology
2012|11 – 2015|04 **Finance**, Master of Science,
Specialization in Corporate Finance and Financial Mathematics,
Chemnitz University of Technology
2009|10 – 2012|10 **Economics and Business Administration**, Bachelor of Science,
Specialization in Vocational and Business Education,
Chemnitz University of Technology

Publication

Hofmann, Tobias and Wenzel, David, **How to minimize cycle times of robot manufacturing systems**, Optimization and Engineering, 2020.

Advanced Training

- 2018 | 07 **Data Science: R Basics**,
edX Online Course, Harvard University
- 2018 | 02 **Academic Writing in English**,
Centre for Young Scientists, Chemnitz University of Technology
- 2015 | 06 **Category Management Basics**,
GS1 Germany

Educational Training

- 2018 | 03 **University Didactics**,
LiT.Workshop, Chemnitz University of Technology
- 2016 | 05 **Teaching in English**,
Centre for Young Scientists, Chemnitz University of Technology
- 2015 | 10 – 2016 | 02 **Developing and Delivering Conference Presentations in English**,
Centre for Young Scientists, Chemnitz University of Technology
- 2015 | 06 **Infectiously and Medial: Sovereign Presentations**,
kommunikation bewegt, Dr. Stephanie Rohac
- 2014 | 08 **Basic Didactical Qualification for Tutors**,
Teaching Quality Initiative, Chemnitz University of Technology

Teaching Experience

- 2018 | 10 – 2020 | 03 **Discrete Mathematics**, Lectures and Tutorials
- 2018 | 04 – 2020 | 03 **Fundamentals of Arithmetic**, Lectures and Tutorials
- 2018 | 04 – 2020 | 03 **Mathematics and Mathematical Didactics**, Lectures and Tutorials
- 2016 | 10 – 2017 | 03 **Max-Plus-Algebra**, Computer Tutorial
- 2014 | 10 – 2015 | 03 **Analysis I**, Consultations
- 2011 | 10 – 2015 | 03 **Introduction to Economics**, Tutorials

Activities as Organizer

- 2019 | 03 Workshop on Optimization, Olbernhau, Germany
- 2018 | 08 22nd Conference on Future Research in Combinatorial Optimization, Chemnitz, Germany

Scholarships

- 2017 **Travel Grant**, InProTUC Project, German Academic Exchange Service (DAAD)
- 2014 – 2015 **Deutschlandstipendium**, Federal Ministry of Education and Research, Germany

Language Skills

- German Native Language
- English C1

Computer Skills

LaTeX

C++

Python

Matlab

R

Presentations

- 2019|09|05 **Periodic Scheduling Tools for Robot Manufacturing Systems**
International Conference on Operations Research, Dresden, Germany
- 2018|08|21 **Minimum Integral Cycle Bases**
22nd Conference on Future Research in Combinatorial Optimization, Chemnitz, Germany
- 2018|07|05 **ISO-PESP: A PESP Variant for Minimizing the Cycle Time of Production Lines**
23rd International Symposium on Mathematical Programming, Bordeaux, France
- 2017|09|08 **Optimizing Periodic Schedules in Robot Based Manufacturing Lines**
International Conference on Operations Research, Berlin, Germany
- 2017|08|18 **A Variant of the Periodic Event Scheduling Problem and its Computational Complexity**
21st Conference on Future Research in Combinatorial Optimization, Trier, Germany
- 2017|07|21 **Periodic Event Scheduling and its Application in Manufacturing Systems**
21st Conference of the International Federation of Operational Research Societies, Québec, Canada
- 2017|06|16 **A Variant of the Periodic Event Scheduling Problem and its Cycle Periodicity Formulation**
13th Workshop on Models and Algorithms for Planning and Scheduling Problems, Seon, Germany
- 2017|03|16 **A Variant of the Periodic Event Scheduling Problem and its Industrial Application**
Workshop on Optimization, Elgersburg, Germany
- 2017|01|24 **Cycle Periodicity Formulations for Periodic Event Scheduling**
20th SEG Workshop on Combinatorics, Graph Theory and Algorithms, Dresden, Germany
- 2017|01|09 **Periodic Event Scheduling and its Industrial Application**
21st Combinatorial Optimization Workshop, Aussois, France
- 2016|08|05 **Optimizing Cycle Times in Robot Based Manufacturing Lines, A Max-Plus-Algebra Approach**
20th Conference on Future Research in Combinatorial Optimization, Osnabrück, Germany
- 2016|07|06 **Optimizing Cycle Times in Robot Based Manufacturing Lines, A Periodic Event Scheduling Approach**
28th EURO Conference, Poznań, Poland
- 2016|06|21 **Optimizing Cycle Times in Robot Based Manufacturing Lines**
19th SEG Workshop on Combinatorics, Graph Theory and Algorithms, Chemnitz, Germany
- 2016|04|15 **Optimierung der Zykluszeiten von Roboterproduktionsanlagen,**
96th Meeting of the GOR Group Real World Mathematical Optimization, Wolfsburg, Germany

Further Memberships and Activities

Member of the German Operations Research Society (GOR) e. V.

Member of the Adam-Ries-Bund e. V.

Member of the SV Mittweidatal 06 Raschau-Markersbach e. V.

Volunteer for UNICEF