




Christoph Johannes Jabs

 Pietari Kalmin katu 5, 00560 Helsinki, Finland
 contact@christophjabs.info |  christophjabs.info

Education and Training

Academic Education

- 08/2020–06/2022** MASTER OF SCIENCE in Computer Science, University of Helsinki (FI),
Final grade: 5 (Grading scale from 5, ‘excellent’, to 0, ‘fail’)
Thesis grade: 5
- 04/2020–08/2020** Select courses in Computer Science, Eberhard Karls University,
Tübingen (DE)
- 03/2016–02/2020** BACHELOR OF ENGINEERING in Mechatronics, Reutlingen University (DE),
Final grade: 1.0 (Grading scale from 1.0, ‘very good’, to 5.0, ‘fail’)
Thesis grade: 1.0
- 09/2008–06/2015** HIGH SCHOOL DIPLOMA Karl-von-Frisch Gymnasium, Dusslingen (Germany)
Final grade: 1.1 (Grading scale from 1.0, ‘very good’, to 6.0, ‘fail’)

Professional Training

- 09/2015–07/2017** APPRENTICESHIP as a Mechatronic Technician, Robert Bosch GmbH,
Reutlingen (DE), Combined with Bachelor’s studies

Professional Experience

- 09/2022–Current** DOCTORAL RESEARCHER at the University of Helsinki (FI)
Supervised by Matti Järvisalo in the Constraint Reasoning and Optimization
research group
- (Multi-objective) declarative optimization
 - Fair data representation
- 05/2021–08/2022** RESEARCH ASSISTANT at the University of Helsinki (FI),
Constraint Reasoning and Optimization research group
- Investigating exact bi-objective optimization
 - Exploring applications of incremental MaxSAT solving
- 10/2019–02/2020** BACHELOR’S THESIS at Robert Bosch GmbH, Reutlingen (DE)
‘A Recurrent Neural Net Approach to Activity Recognition’
- 11/2017–06/2020** STUDENT JOBS AND INTERNSHIPS at Robert Bosch GmbH, Reutlingen (DE)
- Planned and executed data collection for mobile theft detection for eBikes
 - Planned and implemented automation for acoustics measurements of eBikes
 - Integrated an open-source Bluetooth stack into a Python testing framework
 - Implemented software for automatic measurement report generation
 - Implemented software for validating automotive electronic control units

Publications

- 2022a.** ‘A Maximum Satisfiability Based Approach to Bi-Objective Boolean Optimization’. M. Sc. thesis.
University of Helsinki. URL: <http://urn.fi/URN:NBN:fi:hu:lib-202206132323>.
- 2022b** (with Jeremias Berg, Andreas Niskanen and Matti Järvisalo). ‘MaxSAT-Based Bi-Objective
Boolean Optimization’. In: *SAT*. Vol. 236. LIPIcs. Schloss Dagstuhl — Leibniz-Zentrum für Inform-
atik, 12:1–12:23. DOI: 10.4230/LIPIcs.SAT.2022.12. [Single blind peer review].
- 2020.** ‘A Recurrent Neural Net Approach to Activity Recognition’. B. Eng. thesis. Reutlingen University.

Presentations

- 08/2022** ‘MaxSAT-Based Bi-Objective Boolean Optimization’ at *SAT 2022* in Haifa, Israel

Professional Skills

Languages

German — Mother tongue

English — Effective operational proficiency, TOEFL iBT 114

French — Intermediate, DELF B1

Computer Skills

Operating Systems — Linux, Microsoft Windows

Word Processing — L^AT_EX, Markup, Microsoft Word, LibreOffice Writer

Programming Languages — C/C++, Python, Bash, Matlab

Awards and Scholarships

02/2019–07/2022 Scholarship by the GERMAN ACADEMIC SCHOLARSHIP FOUNDATION
07/2021 FRANK GOLTERMAN AWARD for best Bachelor's graduate winter semester 2019/2020 in Mechatronics at Reutlingen University

Training and Workshops

08/2022 13th 'Pragmatics of SAT' workshop at *FLoC 2022* in Haifa, Israel
06/2021 'Introduction to Scientific Computing' by *Aalto scientific computing*, online

Conference Visits

08/2022 *Federated Logic Conference (FLoC)* in Haifa, Israel, including the 25th *International Conference on Theory and Applications of Satisfiability Testing (SAT)*
07/2022 32nd *European Conference on Operational Research (EURO)* in Espoo, Finland

Voluntary Work

08/2022 Volunteering at *Federated Logic Conference 2022* in Haifa, Israel
2013–2020 Volunteering youth work in a YMCA and the Lutheran Church in Germany