Jendrik Seipp

Curriculum Vitae (November 2021)

Personal Details

Name	Dr. Jendrik Seipp
Work address	Department of Computer and Information Science Linköping University 581 83 Linköping, Sweden
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Homepage	https://jendrikseipp.com
Google Scholar	https://scholar.google.com/citations?user=FIJUptoAAAAJ

Current Position

since 01/2021 **Assistant professor (tenure track)**
Representation, Learning and Planning Lab at Linköping University, Sweden

Previous Appointments

03/2018–12/2020 **Post-doctoral researcher**
Artificial Intelligence research group at the University of Basel, Switzerland

03/2013–02/2018 **Research and teaching assistant**
Artificial Intelligence research group at the University of Basel, Switzerland

04/2010–12/2012 **Student assistant**
Foundations of Artificial Intelligence research group at the University of Freiburg, Germany

04/2009–08/2009 **Student assistant**
University Freiburg Medical Center, Germany

10/2007–03/2009 **Student assistant**
Department of Psychology at the University of Freiburg, Germany

Education

02/2018 **Ph.D. degree** from University of Basel, Switzerland
Thesis: *Counterexample-guided Cartesian Abstraction Refinement and Saturated Cost Partitioning for Optimal Classical Planning*
grade *summa cum laude* (with distinction)

12/2012 **M.Sc. in computer science** from University of Freiburg, Germany
grade 1.1 (very good)

- Study abroad: Universidad Politécnica de Madrid, Spain

09/2009 **B.Sc. in computer science** from University of Freiburg, Germany
grade 1.1 (very good)

Summer Schools

10/2020 ICAPS Summer School on Automated Planning & Scheduling
Online

06/2018 International Summer School on Planning and Scheduling
Noordwijk, The Netherlands

09/2013 G-Node Summer School on Advanced Scientific Programming in Python
Zurich, Switzerland

06/2013 International Summer School on Planning and Scheduling
Perugia, Italy

06/2011 ACAI Summer School on Automated Planning and Scheduling
Freiburg, Germany

Research Visits

01/2020–12/2020 Robotics and Intelligent Systems group, University of Oslo, Norway
Project: *Model-based optimization for configuring modular robots*

07/2015–08/2015 Algorithms Lab, University of British Columbia, Vancouver, Canada
Project: *Automatic planner configuration and runtime prediction via machine learning*

Awards

Awards for Academic Publications

08/2021 **Distinguished Paper Award**
for the paper "Learning Generalized Unsolvability Heuristics for Classical Planning"
at IJCAI 2021, held online
(with Simon Ståhlberg and Guillem Francès)

- Out of 4204 conference submissions, there were three winners of the award and one runner-up.

10/2020 **ICAPS Best Dissertation Award**
for the PhD dissertation "Counterexample-guided Cartesian Abstraction Refinement and Saturated Cost Partitioning for Optimal Classical Planning"
at ICAPS 2020 in Nancy, France

- There were two winners of the award.

05/2020 **Best Paper Award**
for the paper "An Atom-Centric Perspective on Stubborn Sets"
at SoCS 2020, held online
(with Gabriele Röger, Malte Helmert and Silvan Sievers)

- Out of 34 submissions, this was the sole recipient of the award.

06/2017 **Best Student Paper Award**
for the paper "Better Orders for Saturated Cost Partitioning in Optimal Classical Planning"
at SoCS 2017 in Pittsburgh, Pennsylvania, USA

- Sole recipient of the award (number of eligible submissions unknown).

02/2015 **Outstanding Paper Award**
for the paper "From Non-Negative to General Operator Cost Partitioning"
at AAAI 2015 in Austin, Texas, USA
(with Florian Pommerening, Malte Helmert and Gabriele Röger)

- Out of 1991 conference submissions, this was the sole recipient of the award.

Awards for Planning Systems

06/2018 **Winner, Deterministic Sequential Satisficing Track**
for the planning system "Fast Downward Stone Soup 2018"
at the 9th International Planning Competition (IPC 2018)
at ICAPS 2018, Delft, The Netherlands
(with Gabriele Röger)

06/2018 **Winner, Deterministic Sequential Cost-Bounded Track**
for the planning system "Fast Downward Stone Soup 2018"
at the 9th International Planning Competition (IPC 2018)
at ICAPS 2018, Delft, The Netherlands
(with Gabriele Röger)

06/2016 **Winner**
for the planning system "Fast Downward Aidos"
at the 1st Unsolvability International Planning Competition (UIPC 2016)
at ICAPS 2016, London, England
(with Florian Pommerening, Silvan Sievers, Martin Wehrle, Chris Fawcett and Yusra Alkhazraji)

10/2014 **Second Place and Best Learner Award, Learning Track**
for the planning system "Fast Downward Cedalion"
at the 8th International Planning Competition (IPC 2014)
at ICAPS 2014, Portsmouth, New Hampshire, USA
(with Silvan Sievers and Frank Hutter)

10/2014 **Third Place and Best Basic Solver Award, Learning Track**
for the planning system "Fast Downward SMAC"
at the 8th International Planning Competition (IPC 2014)
at ICAPS 2014, Portsmouth, New Hampshire, USA
(with Silvan Sievers and Frank Hutter)

06/2011 **Winner, Deterministic Sequential Optimization Track**
for the planning system "Fast Downward Stone Soup-1"
at the 7th International Planning Competition (IPC 2011)
at ICAPS 2011, Freiburg, Germany
(with Malte Helmert, Jörg Hoffmann, Erez Karpas, Emil Keyder, Raz Nissim, Silvia Richter, Gabriele Röger and Matthias Westphal)

06/2011 **Runner-up, Deterministic Sequential Satisficing Track**
for the planning system "Fast Downward Stone Soup-1"
at the 7th International Planning Competition (IPC 2011)
at ICAPS 2011, Freiburg, Germany
(with Malte Helmert, Erez Karpas, Silvia Richter and Gabriele Röger)

06/2011 **Runner-up, Learning Track**
for the planning system "Fast Downward Autotune-speed"
at the 7th International Planning Competition (IPC 2011)
at ICAPS 2011, Freiburg, Germany
(with Chris Fawcett, Malte Helmert, Holger Hoos, Erez Karpas, Gabriele Röger)

Awards at Programming Competitions

03/2011 **Third Place**
at the national programming competition (informatiCup) of the German society for computer science (GI) with Manuel Braun and Jonas Sternisko

03/2009 **Second Place**
at the national programming competition (informatiCup) of the German society for computer science (GI) with Manuel Braun

01/2008 **Finalist**
at the German national competition for e-learning applications (D-ELINA)

Other Awards

04/2013 **MFG Talent Award (*Talente-Preis*)**
at the third MFG talent day held by the Medien- und Filmgesellschaft Baden-Württemberg

Scholarships

10/2009–10/2010 **Christoph Rüchardt scholarship**
Scholarship for students with outstanding achievements during B.Sc. studies

Acquired Funding

All grants as sole primary investigator unless indicated otherwise.

Ongoing Projects

09/2021–08/2025 *Learning Dynamic Algorithms for Automated Planning*
2 546 480 SEK, 1 Ph.D. student
Wallenberg AI, Autonomous Systems and Software Program

Completed Projects

11/2011–10/2012 *Abstraction Refinement for Classical Planning Problems*
9 443 EUR
Karl Steinbuch scholarship by MFG Baden-Württemberg mbH

11/2010–10/2011 *Learning Portfolios of Automatically Tuned Planners*
10 000 EUR
Karl Steinbuch scholarship by MFG Baden-Württemberg mbH
(with Manuel Braun and Johannes Garimort)

Publications

Journal Publications

2020 **Jendrik Seipp**, Thomas Keller, and Malte Helmert.
Saturated cost partitioning for optimal classical planning.
Journal of Artificial Intelligence Research, 67:129–167, 2020.

2018 **Jendrik Seipp** and Malte Helmert.
Counterexample-guided Cartesian abstraction refinement for classical planning.
Journal of Artificial Intelligence Research, 62:535–577, 2018.

Peer-Reviewed Papers at Major Conferences

2021 Dominik Drexler, **Jendrik Seipp**, and Hector Geffner.
Expressing and exploiting the common subgoal structure of classical planning domains using sketches.
In Esra Erdem, Meghyn Bienvenu, and Gerhard Lakemeyer, editors, *Proceedings of the Eighteenth International Conference on Principles of Knowledge Representation and Reasoning (KR 2021)*, 2021.

Dominik Drexler, **Jendrik Seipp**, and David Speck.
Subset-saturated transition cost partitioning.
In Robert P. Goldman, Susanne Biundo, and Michael Katz, editors, *Proceedings of the Thirty-First International Conference on Automated Planning and Scheduling (ICAPS 2021)*, pages 131–139. AAAI Press, 2021.

Florian Pommerening, Thomas Keller, Valentina Halasi, **Jendrik Seipp**, Silvan Sievers, and Malte Helmert.
Dantzig-wolfe decomposition for cost partitioning.
In Robert P. Goldman, Susanne Biundo, and Michael Katz, editors, *Proceedings of the Thirty-First International Conference on Automated Planning and Scheduling (ICAPS 2021)*. AAAI Press, 2021.

Jendrik Seipp.
Online saturated cost partitioning for classical planning.
In Robert P. Goldman, Susanne Biundo, and Michael Katz, editors, *Proceedings of the Thirty-First International Conference on Automated Planning and Scheduling (ICAPS 2021)*. AAAI Press, 2021.

Jendrik Seipp, Thomas Keller, and Malte Helmert.
Saturated post-hoc optimization for classical planning.
In Kevin Leyton-Brown and Mausam, editors, *Proceedings of the Thirty-Fifth AAAI Conference on Artificial Intelligence (AAAI 2021)*, pages 11947–11953. AAAI Press, 2021.

Simon Ståhlberg, Guillem Francès, and **Jendrik Seipp**.
Learning generalized unsolvability heuristics for classical planning.
In Zhi-Hua Zhou, editor, *Proceedings of the 30th International Joint Conference on Artificial Intelligence (IJCAI 2021)*. IJCAI, 2021.

Álvaro Torralba, **Jendrik Seipp**, and Silvan Sievers.
Automatic instance generation for classical planning.
In Robert P. Goldman, Susanne Biundo, and Michael Katz, editors, *Proceedings of the Thirty-First International Conference on Automated Planning and Scheduling (ICAPS 2021)*, pages 376–384. AAAI Press, 2021.

2020 Gabriele Röger, Malte Helmert, **Jendrik Seipp**, and Silvan Sievers.
An atom-centric perspective on stubborn sets.
In Daniel Harabor and Mauro Vallati, editors, *Proceedings of the 13th Annual Symposium on Combinatorial Search (SoCS 2020)*, pages 57–65. AAAI Press, 2020.

Jendrik Seipp, Samuel von Allmen, and Malte Helmert.
Incremental search for counterexample-guided Cartesian abstraction refinement.
In J. Christopher Beck, Erez Karpas, and Shirin Sohrabi, editors, *Proceedings of the Thirtieth International Conference on Automated Planning and Scheduling (ICAPS 2020)*, pages 244–248. AAAI Press, 2020.

2019 **Jendrik Seipp**.
Pattern selection for optimal classical planning with saturated cost partitioning.
In Sarit Kraus, editor, *Proceedings of the 28th International Joint Conference on Artificial Intelligence (IJCAI 2019)*, pages 5621–5627. IJCAI, 2019.

Jendrik Seipp and Malte Helmert.
Subset-saturated cost partitioning for optimal classical planning.
In Nir Lipovetzky, Eva Onaindia, and David E. Smith, editors, *Proceedings of the Twenty-Ninth International Conference on Automated Planning and Scheduling (ICAPS 2019)*, pages 391–400. AAAI Press, 2019.

2017 **Jendrik Seipp**.
Better orders for saturated cost partitioning in optimal classical planning.
In Alex Fukunaga and Akihiro Kishimoto, editors, *Proceedings of the 10th Annual Symposium on Combinatorial Search (SoCS 2017)*, pages 149–153. AAAI Press, 2017.

Jendrik Seipp, Thomas Keller, and Malte Helmert.
A comparison of cost partitioning algorithms for optimal classical planning.
In Laura Barbulescu, Jeremy Frank, Mausam, and Stephen F. Smith, editors, *Proceedings of the Twenty-Seventh International Conference on Automated Planning and Scheduling (ICAPS 2017)*, pages 259–268. AAAI Press, 2017.

Jendrik Seipp, Thomas Keller, and Malte Helmert.
Narrowing the gap between saturated and optimal cost partitioning for classical planning.
In Satinder Singh and Shaul Markovitch, editors, *Proceedings of the Thirty-First AAAI Conference on Artificial Intelligence (AAAI 2017)*, pages 3651–3657. AAAI Press, 2017.

2016 Thomas Keller, Florian Pommerening, **Jendrik Seipp**, Florian Geißer, and Robert Mattmüller.
State-dependent cost partitionings for Cartesian abstractions in classical planning.
In Subbarao Kambhampati, editor, *Proceedings of the 25th International Joint Conference on Artificial Intelligence (IJCAI 2016)*, pages 3161–3169. AAAI Press, 2016.

Jendrik Seipp, Florian Pommerening, Gabriele Röger, and Malte Helmert.
Correlation complexity of classical planning domains.
In Subbarao Kambhampati, editor, *Proceedings of the 25th International Joint Conference on Artificial Intelligence (IJCAI 2016)*, pages 3242–3250. AAAI Press, 2016.

2015 Florian Pommerening, Malte Helmert, Gabriele Röger, and **Jendrik Seipp**.
From non-negative to general operator cost partitioning.
In Blai Bonet and Sven Koenig, editors, *Proceedings of the Twenty-Ninth AAAI Conference on Artificial Intelligence (AAAI 2015)*, pages 3335–3341. AAAI Press, 2015.

Jendrik Seipp, Florian Pommerening, and Malte Helmert.
New optimization functions for potential heuristics.
In Ronen Brafman, Carmel Domshlak, Patrik Haslum, and Shlomo Zilberstein, editors, *Proceedings of the Twenty-Fifth International Conference on Automated Planning and Scheduling (ICAPS 2015)*, pages 193–201. AAAI Press, 2015.

Jendrik Seipp, Silvan Sievers, Malte Helmert, and Frank Hutter.
Automatic configuration of sequential planning portfolios.
In Blai Bonet and Sven Koenig, editors, *Proceedings of the Twenty-Ninth AAAI Conference on Artificial Intelligence (AAAI 2015)*, pages 3364–3370. AAAI Press, 2015.

2014 **Jendrik Seipp** and Malte Helmert.
Diverse and additive Cartesian abstraction heuristics.
In Steve Chien, Alan Fern, Wheeler Ruml, and Minh Do, editors, *Proceedings of the Twenty-Fourth International Conference on Automated Planning and Scheduling (ICAPS 2014)*, pages 289–297. AAAI Press, 2014.

2013 **Jendrik Seipp** and Malte Helmert.
Counterexample-guided Cartesian abstraction refinement.
In Daniel Borrajo, Subbarao Kambhampati, Angelo Oddi, and Simone Fratini, editors, *Proceedings of the Twenty-Third International Conference on Automated Planning and Scheduling (ICAPS 2013)*, pages 347–351. AAAI Press, 2013.

2012 **Jendrik Seipp**, Manuel Braun, Johannes Garimort, and Malte Helmert.
Learning portfolios of automatically tuned planners.
In Lee McCluskey, Brian Williams, José Reinaldo Silva, and Blai Bonet, editors, *Proceedings of the Twenty-Second International Conference on Automated Planning and Scheduling (ICAPS 2012)*, pages 368–372. AAAI Press, 2012.

Peer-Reviewed Workshop Papers

2020 Patrick Ferber and **Jendrik Seipp**.
Explainable planner selection.
In *ICAPS 2020 Workshop on Explainable AI Planning (XAIP)*, 2020.

Jendrik Seipp.
Online saturated cost partitioning for classical planning.
In *ICAPS 2020 Workshop on Heuristics and Search for Domain-independent Planning (HSDIP)*, pages 16–22, 2020.

Álvaro Torralba, **Jendrik Seipp**, and Silvan Sievers.
Automatic configuration of benchmark sets for classical planning.
In *ICAPS 2020 Workshop on Heuristics and Search for Domain-independent Planning (HSDIP)*, pages 58–66, 2020.

2019 **Jendrik Seipp**.
Pattern selection for optimal classical planning with saturated cost partitioning.
In *ICAPS 2019 Workshop on Heuristics and Search for Domain-independent Planning (HSDIP)*, pages 72–80, 2019.

Jendrik Seipp.
Planner metrics should satisfy independence of irrelevant alternatives.
In *ICAPS 2019 Workshop on the International Planning Competition (WIPC)*, pages 40–41, 2019.

2016 **Jendrik Seipp**, Florian Pommerening, Gabriele Röger, and Malte Helmert.
Correlation complexity of classical planning domains.
In *ICAPS 2016 Workshop on Heuristics and Search for Domain-independent Planning (HSDIP)*, pages 12–20, 2016.

2013 **Jendrik Seipp** and Malte Helmert.
Additive counterexample-guided Cartesian abstraction refinement.
In Marie desJardins and Michael L. Littman, editors, *Late-Breaking Developments in the Field of Artificial Intelligence – Papers Presented at the Twenty-Seventh AAAI Conference on Artificial Intelligence (AAAI 2013) – AAAI Technical Report WS-13-17*, pages 119–121. AAAI Press, 2013.

2011 Chris Fawcett, Malte Helmert, Holger Hoos, Erez Karpas, Gabriele Röger, and **Jendrik Seipp**.
FD-Autotune: Domain-specific configuration using Fast Downward.
In *ICAPS 2011 Workshop on Planning and Learning*, pages 13–17, 2011.

Jendrik Seipp and Malte Helmert.
Fluent merging for classical planning problems.
In *ICAPS 2011 Workshop on Knowledge Engineering for Planning and Scheduling*, pages 47–53, 2011.

Theses

2018 **Jendrik Seipp**.
Counterexample-guided Cartesian Abstraction Refinement and Saturated Cost Partitioning for Optimal Classical Planning.
PhD thesis, University of Basel, 2018.

2012 **Jendrik Seipp**.
Counterexample-guided abstraction refinement for classical planning.
Master's thesis, University of Freiburg, 2012.

2009 **Jendrik Seipp**.
Fluent Merging für klassische Planungsprobleme.
Bachelor's thesis, University of Freiburg, 2009.

Planner Abstracts

2018 **Jendrik Seipp**.
Fast Downward Remix.
In *Ninth International Planning Competition (IPC-9): planner abstracts*, pages 74–76, 2018.

Jendrik Seipp.
Fast Downward Scorpion.
In *Ninth International Planning Competition (IPC-9): planner abstracts*, pages 77–79, 2018.

Jendrik Seipp and Gabriele Röger.
Fast Downward Stone Soup 2018.
In *Ninth International Planning Competition (IPC-9): planner abstracts*, pages 80–82, 2018.

2016 Florian Pommerening and **Jendrik Seipp**.
Fast Downward dead-end pattern database.
In Christian Muise and Nir Lipovetzky, editors, *Unsolvability International Planning Competition: planner abstracts*, page 2, 2016.

Jendrik Seipp, Florian Pommerening, Silvan Sievers, Martin Wehrle, Chris Fawcett, and Yusra Alkhazraji.
Fast Downward Aidos.
In Christian Muise and Nir Lipovetzky, editors, *Unsolvability International Planning Competition: planner abstracts*, pages 28–38, 2016.

2014 Gabriele Röger, Florian Pommerening, and **Jendrik Seipp**.
Fast Downward Stone Soup 2014.
In *Eighth International Planning Competition (IPC-8): planner abstracts*, pages 28–31, 2014.

Jendrik Seipp, Manuel Braun, and Johannes Garimort.
Fast Downward uniform portfolio.
In *Eighth International Planning Competition (IPC-8): planner abstracts*, page 32, 2014.

Jendrik Seipp, Silvan Sievers, and Frank Hutter.
Fast Downward Cedalion.
In *Eighth International Planning Competition (IPC-8): planner abstracts*, pages 17–27, 2014.

Jendrik Seipp, Silvan Sievers, and Frank Hutter.
Fast Downward Cedalion.
In *Eighth International Planning Competition (IPC-8) Planning and Learning Part: planner abstracts*, 2014.

Jendrik Seipp, Silvan Sievers, and Frank Hutter.
Fast Downward SMAC.
In *Eighth International Planning Competition (IPC-8) Planning and Learning Part: planner abstracts*, 2014.

2011 Carmel Domshlak, Malte Helmert, Erez Karpas, Emil Keyder, Silvia Richter, Gabriele Röger, **Jendrik Seipp**, and Matthias Westphal.
BJOLP: The big joint optimal landmarks planner.
In *IPC 2011 planner abstracts*, pages 91–95, 2011.

Chris Fawcett, Malte Helmert, Holger Hoos, Erez Karpas, Gabriele Röger, and **Jendrik Seipp**.
FD-Autotune: Automated configuration of Fast Downward.
In *IPC 2011 planner abstracts*, pages 31–37, 2011.

Chris Fawcett, Malte Helmert, Holger Hoos, Erez Karpas, Gabriele Röger, and **Jendrik Seipp**.
FD-Autotune: Domain-specific configuration of Fast Downward.
In *IPC 2011 planner abstracts, Planning and Learning Part*, 2011.

Malte Helmert, Gabriele Röger, **Jendrik Seipp**, Erez Karpas, Jörg Hoffmann, Emil Keyder, Raz Nissim, Silvia Richter, and Matthias Westphal.
Fast Downward Stone Soup.
In *IPC 2011 planner abstracts*, pages 38–45, 2011.

Academic Presentations

Invited Talks

06/2020 Robotics and Intelligent Systems group, University of Oslo, Norway.
Topic: *Model-Based Optimization with SMAC*.

01/2020 Robotics and Intelligent Systems group, University of Oslo, Norway.
Topic: *AI Planning, Abstractions and Cost Partitioning*.

07/2015 Algorithms Lab, University of British Columbia, Vancouver, Canada.
Topic: *Potential Heuristics for Optimal Classical Planning*.

09/2014 COnfiguration and SElection of ALgorithms Workshop (COSEAL 2014) held in Freiburg, Germany.
Topic: *Automatic Configuration of Sequential Planning Portfolios*.

11/2013 SGAICO Annual Assembly and Workshop (SGAICO 2013) held in Lausanne, Switzerland.
Topic: *Counterexample-guided Abstraction Refinement for Classical Planning*.

Tutorials at Major Conferences

10/2020 Tutorial at the Thirtieth International Conference on Automated Planning and Scheduling (ICAPS 2020) held online.
Topic: *Evaluating Planners with Downward Lab*.

06/2015 Tutorial at the Twenty-Fifth International Conference on Automated Planning and Scheduling (ICAPS 2015) held in Jerusalem, Israel.
Topic: *Latest Trends in Abstraction Heuristics for Classical Planning* (with Malte Helmert and Silvan Sievers).

Academic Service

Journals

AIJ Artificial Intelligence Journal
- Reviewer (2017)

AIJ Journal of Artificial Intelligence Research
- Reviewer (2020, 2021)

Conferences

AAAI AAAI Conference on Artificial Intelligence
- PC member (2019, 2020, 2021, 2022)

ICAPS International Conference on Automated Planning and Scheduling

- PC member (2019, 2020, 2021, 2022)
- Advocate (2020)

IJCAI International Joint Conference on Artificial Intelligence

- SPC member (2021)
- PC member (2019, 2020, 2022)

Workshops

HSDIP Workshop for Heuristics and Search for Domain-Independent Planning

- Organizer of HSDIP 2020 (with Alberto Camacho, Salomé Eriksson, Daniel Fišer, Guillem Francès, Florian Geisser, Patrik Haslum, Silvan Sievers, David Speck and Álvaro Torralba)
- Organizer of HSDIP 2019 (with Guillem Francès, Florian Geisser, Daniel Gnad, Patrik Haslum, Florian Pommerening, Miquel Ramirez and Silvan Sievers)
- Organizer of HSDIP 2017 (with J. Benton, Nir Lipovetzky, Florian Pommerening, Miquel Ramirez, Enrico Scala and Álvaro Torralba)

Seminars

LiU Seminar of the Artificial Intelligence and Integrated Computer Systems Division (AIICS)

- Organizer (2021)

Teaching

Fall 2019 Lecturer for the seminar "Scientific Writing" at the University of Basel (English, with Craig Hamilton)

Spring 2019 Teaching assistant for the lecture "Foundations of Artificial Intelligence" at the University of Basel (English, lecturer: Malte Helmert)

Spring 2017 Teaching assistant for the lecture "Foundations of Artificial Intelligence" at the University of Basel (English, lecturer: Malte Helmert)

Fall 2014 Lecturer for the seminar and project "Open Source Software Development" at the University of Basel (German, with Malte Helmert)

Supervision of Ph.D. Students

since 09/2021 Paul Höft

since 11/2020 Dominik Drexler
(jointly supervised with Hector Geffner)

Supervision of M.Sc. Students

At University of Basel

01/2015 Patrick von Reth
Empirical Evaluation of Search Algorithms for Satisficing Planning

Supervision of B.Sc. Students

At University of Basel

10/2020 Caroline Steiblin
Bounded Suboptimal Search for Classical Planning

07/2019 Martin Zumsteg
Refinement Strategies for Counterexample-Guided Cartesian Abstraction Refinement

05/2019 Samuel von Allmen
Computing Abstract Plans for Counterexample-Guided Cartesian Abstraction Refinement

06/2018 Clemens Büchner
Abstraction Heuristics for Rubik's Cube

03/2017 Daniel Killenberger
Diversifying Greedy Best-First Search by Clustering States

12/2013 Beat Hänger
Phase Transitions in the Solvability of Sokoban

Open Source Projects

Downward Lab — Experiment framework (creator and maintainer)

Fast Downward — Planning system (co-maintainer)

Scorpion — Optimal classical planner (creator and maintainer)

Pyperplan — Python planner (co-creator and co-maintainer)

RedNotebook — Desktop journal (creator and maintainer)

Vulture — Python dead code detector (creator and maintainer)