



Teaching: Stefan Edelkamp

Lecturing at Hochschule Darmstadt

Teaching lecture *Komplexitätstheorie* (WS 2015/16, SS 2016).
Teaching lecture *IT-Security* (SS 2016).
Teaching seminar *Vorbereitung auf Praktikum und Bachelorarbeit* (SS 2016).

Lecturing at Universität Bremen

Teaching lecture *Maschinelles Lernen* (SS 2014, SS 2015, WS 2016/2017).
Teaching lecture *IT-Logistik* (SS 2014).
Teaching lecture *Praktische Informatik I* (WS 2013/14).
Teaching lecture *Algorithmische Intelligenz* (SS 2013).
Teaching assistant lecture *Praktische Informatik I* (WS 2012/13).
Supervising project group *GGP++* (WS 2011/12 – SS 2012).
Teaching lecture *Algorithmentheorie* (SS 2011).
Teaching lecture *Handlungsplanung und Allgemeines Spiel* (WS 2010/11).
Teaching lecture *Algorithm Engineering* (SS 2010).
Teaching seminar *Spieltheorie* (SS 2010).
Supervising project group *FIDIUS* (WS 2009/10 – SS 2011).
Teaching lecture *Algorithm Engineering* (SS 2009).
Teaching seminar *Spieltheorie* (SS 2009).

Lecturing at Technische Universität Dortmund

Teaching lecture *Algorithm Design auf Moderner Hardware* (WS 2008/09).
Teaching lecture *Spieltheorie* (SS 2008).
Teaching lecture *Handlungsplanung* (WS 2007/2008).
Teaching lecture *Gerichtete Modellprüfung* (SS 2007).
Teaching lecture *Suchalgorithmen* (WS 2006/07).
Teaching seminar *Externe Exploration* (SS 2006).
Supervising project group *Bug-Finder* (WS 2005/06 – SS 2006).
Teaching lecture *Künstliche Intelligenz* (WS 2005/06).
Teaching lecture *Gerichtete Modellprüfung* (SS 2005).
Supervising project group *Mod-Plan* (WS 2004/05 – SS 2005).
Teaching lecture *Künstliche Intelligenz* (WS 2004/05).
Supervising project group *GPS-Route* (SS 2004 – WS 2004/05).

Teaching lecture *Handlungsplanung* (SS 2004).
Teaching lecture *Heuristische Suche* (WS 2003/04).

**Lecturing at
Universität
Freiburg**

Teaching assistant lecture *Algorithmische Biologie* (SS 2002).
Teaching assistant lecture *Parallel Algorithms and Applications* (SS 2002).
Teaching assistant lecture *Applied Computer Science* (WS 2001/02).
Teaching assistant lecture *Theoretische Informatik* (WS 2000/01).
Teaching assistant lecture *Programmierung* (WS 2000/01).
Teaching assistant lecture *Datenstrukturen und Algorithmen* (SS 2000).
Teaching assistant lecture *Algorithmentheorie* (WS 1999/00).
Teaching assistant lecture *Geometrische Algorithmen* (SS 1999).
Teaching assistant lecture *Datenstrukturen und Algorithmen* (SS 1999).
Teaching assistant lecture *Programmierung* (WS 1998/99).

**Lecturing at
Berufsakademie
Lörrach**

Teaching lecture *Automaten- und Komplexitätstheorie* (WS 2001/02).
Teaching lecture *Theoretische Informatik* (WS 1997/98).
Teaching lecture *Theoretische Informatik* (WS 1996/97).

PhDs

Christoph Greulich. Thema: *Route Planning & Multi-Agent Simulation for Production Logistics*.
Malte Humann. Thema: *Automated Time Series Analyses for Advanced IT-Monitoring*.
Andreas Sandkamp. Thema: *Prediction for Improved Food Production*.
Abdallah Saffadine (Gutachter). Dissertation: *Solving Games and All That*, University of Paris, 2013
Daniel Michulke (Gutachter). Dissertation: *Evaluation Functions in General Game Playing*, University of Dresden, 2012.
Carsten Elfers. Dissertation: *Event Correlation Using Conditional Exponential Models with Tolerant Pattern Matching Applied to Incident Detection*
Peter Kissmann. Dissertation: *Symbolic Search in Planning and General Game Playing*, Universität Bremen, 2012 [Summa Cum Laude].
Damian Sulewski. Dissertation: *Large-Scale Parallel State Space Search Utilizing Graphics Processing Units and Solid State Disks*, Universität Bremen, 2011.
Pavel Simecek (Gutachter). Dissertation: *External Memory LTL Model Checking*, University of Brno, 2009.
Shahid Jabbar. Dissertation: *External Memory Algorithms for State Space Exploration in Model Checking and Planning*. 2008, Technische Universität Dortmund [Summa Cum Laude, ICAPS-Dissertation Award].
Anton Wijs (Gutachter). Dissertation: *What to Do Next? Analyzing and Optimizing System Behavior in Time*. 2007, Centrum voor Wiskunde en Informatica (CWI) Amsterdam, Netherlands.
Kairong Qian (Gutachter). Dissertation: *Formal Verification using Heuristic Search and Abstraction Techniques*. 2006, University of Southern Wales, Australia.
Tilman Mehler. Dissertation: *Challenges and Applications of Assembly-Level Software Model Checking* 2005, Technische Universität Dortmund.
Alberto Lluch-Lafuente. Dissertation: *Directed Search for the Verification of Communication Protocols* 2003, University of Freiburg.

**Master & Bachelor
Students**

- Sebastian Hellmann. *Visual Servoing mit Nebenbedingungen auf einen mobilen Manipulator* (with Frank Kirchner), 2016.
- Simon Frerichs. *Auswahl, Bewertung und Implementierung eines geeigneten Verfahrens der Analyse von Netflow Daten zur Abwehr von Distributed-Denial-of-Service-Attacks* (with Carsten Bormann), 2016.
- Denis Golubev. *Physical Vehicle Routing Problem* (with Rolf Drechsler), 2016
- Steffen Ernst. *Landmarkenerkennung mit Google Streetview Bildern* (with Rainer Malaka), 2016.
- Fritz Jacob. *Ereignis-basierte Analyse von Mediadateien mit Methoden des maschinellen Lernens* (with Udo Frese), 2015
- Tim Meywerk. *Neue Strategieansätze für Stratego-Bots* (with Rolf Drechsler), 2015.
- Zihao Tang. *Monte-Carlo Suche in der Sequenzalignierung* (with Stefan Kurtz) 2015.
- Paul Wichern. *Lösung von Packungsproblemen in additiven Fertigungsverfahren*, (with Gabriel Zachmann) 2014.
- Aleksej Michalik. *Einsatz neuronaler Netze zur Erkennung von Schadsoftware* (with Kerstin Schill), 2013.
- Jan-Michel Smidt. *Detecting Copyright Violations in Object Code* (with Rainer Koschke), 2013.
- Tobias Lauer. *Analysis of the GDL-II Player Nexusbaum* (with Stefan Göller), 2013.
- Christoph Greulich. *Agent-based Intermodal Navigation in Dynamic Environments* (with Klaus-Dieter Thoben), 2013.
- Martha Rothe. *Symbolic and Explicit Search Hybrid Through Perfect Hash Functions* (with Rolf Drechsler), 2013.
- Dominik Elsbroek. *Monitoring Network Traffic With IPFIX to Detect Well-Known IPv6 Attacks* (with Carsten Bormann), 2012.
- Marten Wirsik. *Statistical Pattern Matching and Machine Learning for Analyzing Computer Networks* (with Carsten Bormann), 2012.
- Paul Nemkovic. *Multi-Core Priority Queues* (with Sabine Kuske), 2012.
- Michael Mester. *Design and Implementation of a Distributed Web-Client for Application in the Area of Ubiquitous Computing* (with Gerrit Kalkbrenner), 2011.
- Tim Federholzner. *Randomization and Partial Observability in General Game Playing* (with Karsten Hölscher), 2011.
- David Zastrau. *Accelerated Machine Learning Algorithms on the GPU* (with Lutz Frommberger), 2011.
- Lasse Sievers. *Extracting Heuristics in General Game Playing* (with Rainer Koschke), 2012.
- Ali Shabani. *Improved Inference of Street Maps on Basis of Open-Street-Map Raw Data* (with Gerrit Kalkbrenner), 2010.
- Cengizhan Yücel. *Solving One- and Two-Player Games on the Graphics Card with Perfect Hash Functions* (with Jan Vahrenhold), 2010.
- Mark Kellershoff. *Abstraction & Planning for Program Model Checking* (with Bernhard Steffen), 2008.
- Damian Sulewski. *Parallel Software Model Checking in StEAM* (with Bernhard Steffen), 2007.
- Björn Borowsky. *Optimal Metric Planning with Presburger Automata* (with Thomas Schwentick), 2007.
- Kenneth Kahl. *Machine Learning Algorithms for the Strategic Game Hex* (with Lars Hildebrand), 2007.
- Peter Kissmann. *External Multiple Sequence Alignment* (with Thomas Hofmeister), 2007.

- Maxim Zaks. *Efficient Algorithms for the Analysis of Graph Transformation Systems* (with Barbara König), 2007.
- Björn Scholz. *Automatic Inference of Road Maps based on GPS Traces* (with Petra Mutzel), 2006.
- Mohammed Nazih. *Efficient Action Planning in PDDL3* (with Katharina Morik), 2006.
- Shahid Jabbar. *GPS-based Navigation in Static and Dynamic Environments* (with Thomas Ottmann), 2003.
- Tilman Mehler. *Directed Java Program Verification* (with Stefan Leue), 2002.
- Danyal Kurban. *New Methods for Computing Shortest Paths* (with Thomas Ottmann), 2002.
- Thorsten Kreuzer. *Pattern Databases for Solving Chess Endgames* (with Thomas Ottmann), 2001.
- Malte Helmert. *Implementing a Planner for the Exploration with Binary Decision Diagrams*, 1999.