

Sven Apel

Curriculum Vitae

2018-02-08



Coordinates

Position: Full Professor

Affiliation: University of Passau
Department of Informatics and Mathematics
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Citizenship: German
Town of birth: Osterburg, Germany

Year of birth: 1977
Marital status: Married, three children

WWW: <http://www.infosun.fim.uni-passau.de/se/apel/>

Research Interests

A key vision driving my research is to empower software engineering practice to enter an **era of intensive automation**. I develop and evaluate methods, tools, and theories for the construction of manageable, reliable, efficient, configurable, and evolvable software systems. In particular, I am interested in:

- Software product lines and configurable systems
- Domain-specific generation and optimization
- Software analytics and intelligence
- Empirical methods and the human factor in software engineering

I apply my research results routinely to real-world software systems and projects from different domains, in particular, data-intensive, operating, and high-performance computing systems, both from the open-source realm or in collaborations with partners from industry, such as Siemens AG, Bosch Austria, Airbus Helicopters, and Fraunhofer IESE.

Education

Mar. 2003 – Mar. 2007 Doctoral degree in Computer Science (Doktor-Ingenieur),
University of Magdeburg, Germany,
Grade “**summa cum laude**” (with distinction)

Oct. 1996 – Jul. 2002 Diploma degree in Computer Science (Diplom-Informatiker),
University of Magdeburg, Germany, Grade “**A**” (excellent)

Academic Employment

since Apr. 2016 Full Professor (tenured since Oct. 2017),
Chair of Software Engineering I, University of Passau, Germany

Oct. 2013 – Mar. 2016 Full Professor (untenured),
Chair of Software Product Lines, University of Passau, Germany

Nov. 2010 – Sep. 2013 Leader of the Emmy-Noether Research Group
“Safe and Efficient Software Product Lines”,
University of Passau, Germany

Jul. 2012 – Sep. 2012	Visiting Scholar, Hosts: Prof. Joanne Atlee and Prof. Krzysztof Czarnecki, University of Waterloo, Canada
Apr. 2007 – Oct. 2010	Akademischer Rat (Post-Doc), Host: Prof. Christian Lengauer, University of Passau, Germany
Jan. 2006 – Jul. 2006	Visiting Scholar, Host: Prof. Don Batory, University of Texas at Austin, USA
Mar. 2003 – Mar. 2007	Research Assistant, Supervisor: Prof. Gunter Saake, University of Magdeburg, Germany

Awards and Honors

Dec. 2016	Hugo Junkers Award for Research and Innovation, awarded by the State of Saxony-Anhalt (Category ‘Innovative Research Alliance’)
Jun. 2015	Appointment to the Young Academy of Europe
May 2015	ACM SIGSOFT Distinguished Paper Award , 37th International Conference on Software Engineering (ICSE)
Mar. 2015	Best Paper Award, 14th International Conference on Modularity
Jan. 2013	Heisenberg Professorship of the German Research Foundation
Aug. 2011	Best Research Paper Award, 15th International Software Product Line Conference (SPLC)
Sep. 2010	Emmy-Noether Fellowship of the German Research Foundation
Feb. 2008	Nominated for the Dissertation Award of the German Computer Science Society
Nov. 2007	Dissertation Award of the University of Magdeburg, endowed by the Karin-Witte Foundation
Sep. 2007	Software-Engineering Award of the Ernst-Denert Foundation for the Best Doctoral Dissertation
Dec. 2006	Award of the School of Computer Science, University of Magdeburg for Outstanding Scientific Achievements

Research Grants

- Performance Evolution of Highly Configurable Software Systems (Pervolution), funded by **DFG** (AP 206/11-1): 2017–2020, **290 000 €** of **580 000 €**, with Norbert Siegmund
- Advanced Stencil-Code Engineering (ExaStencils), funded within **DFG Priority Program 1648** (AP 206/7-1&2): 2013–2018, **510 000 €** of **2 500 000 €**, with Christian Lengauer, Ulrich Rude, Jürgen Teich, and Matthias Bolten
- Generation of Correct and Efficient Software based on Product-Line Technology (SafeSPL++), funded within **DFG Heisenberg Program** (AP 206/6-1&2): 2013– 2018, **660 000 €**
- Techniques and Prediction Models for Sustainable Product-Line Engineering (Pythia), funded within **DFG Priority Program 1593** (AP 206/5-1&2): 2012–2017, **700 000 €**
- Taming and Optimizing Feature Interaction in Software-intensive Automotive Systems (FeatureOpt), funded by **FFG**: 2015–2018, **100 000 €** of **500 000 €**, with Hermann Kaindl and Bosch Austria
- Software Intelligence, funded by **Siemens AG**: 2013–2016, **50 820 €**
- Safe and Efficient Software Product Lines (SafeSPL), funded within **DFG Emmy-Noether Program** (AP 206/4-1&2): 2010–2015, **1 300 000 €**
- Typing of MapReduce (MapReduceFoundation), funded by **DFG** (LE 912/13-1): 2011–2013, **160 000 €** (no share), with Christian Lengauer
- Algebra-Based Feature-Oriented Program Synthesis (FeatureFoundation), funded by **DFG** (AP 206/2-1&2): 2009–2013, **320 000 €** of **640 000 €**, with Christian Lengauer and Bernhard Möller

Software (selected)

- **FeatureHouse**
Language-Independent Feature Composition
<http://fosd.net/fh/>
- **JDime**
Structured Merge of Software Versions
<http://fosd.net/JDime/>
- **cppstats**
Analyzing C Preprocessor Directives
<http://fosd.net/cppstats/>
- **SPL Conqueror**
Performance Prediction of Software Variants
<http://fosd.net/SPLConqueror/>
- **TypeChef**
Variability-Aware Static Analysis
<http://fosd.net/TypeChef/>
- **Codeface**
Project Analysis and Dashboard Framework
<http://siemens.github.io/codeface/>

Professional Service

Departmental Service

- Vice Chair of the Board of Examiners for Doctoral Awards, since 2016
- Member of the Board of Examiners for Computer Science, since 2013
- Head of the Master Program of Computer Science, 2013–2015
- Member of the Accreditation Committee for Computer Science, 2014
- Hiring Committees: 7 (chaired: 2)

Award Committees

- Jury of the Dissertation Award of the German Computer Science Society, since 2017

Steering Committees (selected)

- ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE), since 2017
- IEEE/ACM Int'l Conference on Automated Software Engineering (ASE), since 2016

Organization Committees (selected)

- 27th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE'19), **Program Committee Chair**
- 31th IEEE/ACM Int'l Conference on Automated Software Engineering (ASE'16), **Program Committee Chair**
- Dagstuhl Seminar on Feature Interactions: The Next Generation, 2014
- 10th Int'l Conference on Software Composition (SC'11), **Program Committee Chair**
- Dagstuhl Seminar on Feature-Oriented Software Development, 2011
- Dagstuhl Seminar on Software Engineering for Tailor-made Data Management, 2008

Editorships

- IEEE Transactions on Software Engineering, Member of Editorial Board, since 2017
- Empirical Software Engineering, Member of Editorial Board, since 2015
- IEEE Software, Member of Editorial Board, since 2015
- Science of Computer Programming, Guest Editor, Special Issue on FOSD, 2009

Program Committees (selected)

- ACM/IEEE Int'l Conference on Software Engineering (ICSE), 2014–2017, 2019
- ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE), 2013, 2018, 2019
- IEEE/ACM Int'l Conference on Automated Software Engineering (ASE), 2009–2011, 2013–2018
- European Conference on Object-Oriented Programming (ECOOP), 2011, 2014, 2016

Invited Talks and Lectures (selected)

- Publishing your Research: Strategies, Prospects, and Pitfalls
Invited Lecture at the New Faculty Symposium of 40th International Conference on Software Engineering, Gothenburg, Sweden, 2018
- Understanding Organizational Evolution of Software Projects
Keynote at the Annual German Software Engineering Conference, Ulm, Germany, 2018
- The New Feature Interaction Challenge,
Keynote at the International Workshop on Variability Modelling of Software-intensive Systems, Eindhoven, The Netherlands, 2017
- From Crosscutting Concerns to Feature Interactions: A Tale of Misunderstandings and Enlightenments, **Keynote** at the International Conference on Modularity, Malaga, Spain, 2016
- Conquering the Combinatorial Explosion: Analyzing Variable Software,
Keynote at the Brazilian Symposium on Software Components, Architectures and Reuse, Maceió, Brazil, 2014
- Language-Independent and Automated Software Composition: The FeatureHouse Experience,
Keynote at the International Conference on Software Composition, Budapest, 2013

Supervision of Students

Ph.D. students (current)

- Florian Sattler, since 2017
- Christian Kaltenecker, since 2016
- Thomas Bock, since 2016
- Georg Seibt, since 2016
- Gustavo Do Vale, since 2016
- Andreas Stahlbauer, since 2015
- Alexander Grebhahn, since 2013
- Claus Hunsen, since 2012
- Olaf LeBenich, since 2012
- Sergiy Kolesnikov, since 2011

Ph.D. students (graduated)

- Dr. Mitchell Joblin, 2017
- Dr. Alexander von Rhein, 2016, **Dissertation Award of the University of Passau**
- Dr. Jörg Liebig, 2015, **Software-Engineering Award of the Ernst-Denert Foundation**

Master theses: 22

Bachelor theses: 23

Diploma theses: 11

Teaching

Lectures

- Software Product Line Engineering, since 2011
- Types and Programming Languages, since 2008
- Software Engineering, 2010–2012
- Modern Programming Paradigms, 2007–2010
- Computer Science for Non-Computer Scientists, 2008–2009

Lab Exercises

- Software Engineering Praktikum, 2016–2017

Seminars

- Configurable Software Systems, since 2015
- Software Evolution, 2014
- Modern Analysis Techniques of Product Lines, 2012
- Software Engineering for Exascale Computing, 2012–2013
- Software Product Line Engineering, 2009–2011

- Modern Programming Paradigms, 2008
- Database Implementation Techniques, 2004

Working Groups

- Feature-Oriented Software Development, since 2009
- Paper Reading Group, since 2013

Miscellaneous

- Students' Computer Science Summer Camp, University of Passau, 2007

Publications (selected) total: 195 h-index: 51 i10-index: 131 ¹

Electronic versions of all publications are available on the Web:

<http://www.infosun.fim.uni-passau.de/se/apel/>.

Dissertation

1. Sven Apel. *The Role of Features and Aspects in Software Development*. PhD thesis, School of Computer Science, University of Magdeburg, March 2007. **Software-Engineering Award of the Ernst-Denert Foundation.**

Books

1. Sven Apel, Don Batory, Christian Kästner, and Gunter Saake. *Feature-Oriented Software Product Lines: Concepts and Implementation*. Springer-Verlag, October 2013. 315 pages, ISBN 978-3-642-37520-0.

Refereed Journal Articles (selected)

17. Claire Le Goues, Yuriy Brun, Sven Apel, Emery Berger, Sarfrad Khurshid, and Yannis Smaragdakis. Effectiveness of Anonymization in Double-Blind Review. *Communications of the ACM*, 2018. To appear.
16. Jianmei Guo, Dingyu Yang, Norbert Siegmund, Sven Apel, Atrisha Sarkar, Pavel Valov, Krzysztof Czarnecki, Andrzej Wasowski, and Huiqun Yu. Data-Efficient Performance Learning for Configurable Systems. *Empirical Software Engineering (EMSE)*, 2018. To appear.
15. Flavio Medeiros, Marcio Ribeiro, Rohit Gheyi, Sven Apel, Christian Kästner, Bruno Ferreira, Luiz Carvalho, and Balduino Fonseca. Discipline Matters: Refactoring of Preprocessor Directives in the #ifdef Hell. *IEEE Transactions on Software Engineering (TSE)*, 2018. To appear.
14. Stefan Ganser, Armin Gröblinger, Norbert Siegmund, Sven Apel, and Christian Lengauer. Iterative Schedule Optimization for Parallelization in the Polyhedron Model. *ACM Transactions on Architecture and Code Optimization (TACO)*, 14(3):23:1–23:26, September 2017.
13. Mitchell Joblin, Sven Apel, and Wolfgang Mauerer. Evolutionary Trends of Developer Coordination: A Network Approach. *Empirical Software Engineering (EMSE)*, 22(4):2050–2094, August 2017.
12. Jörg Liebig, Sven Apel, Andreas Janker, Florian Garbe, and Sebastian Oster. Handling Static Configurability in Refactoring Engines. *IEEE Computer*, 50(7):44–53, July 2017.
11. Leonardo Passos, Leopoldo Teixeira, Nicolas Dintzner, Sven Apel, Andrzej Wasowski, Krzysztof Czarnecki, Paulo Borba, and Jianmei Guo. Coevolution of Variability Models and Related Software Artifacts: A Fresh Look at Evolution Patterns in the Linux Kernel. *Empirical Software Engineering (EMSE)*, 21(4):1744–1793, August 2016.
10. Stefan Sobernig, Sven Apel, Sergiy Kolesnikov, and Norbert Siegmund. Quantifying Structural Attributes of System Decompositions in 28 Feature-oriented Software Product Lines: An Exploratory Study. *Empirical Software Engineering (EMSE)*, 21(4):1670–1705, August 2016.
9. Claus Hunsen, Bo Zhang, Janet Siegmund, Christian Kästner, Olaf Lessenich, Martin Becker, and Sven Apel. Preprocessor-Based Variability in Open-Source and Industrial Software Systems: An Empirical Study. *Empirical Software Engineering (EMSE)*, 21(2):449–482, April 2016.

¹The h-index and the i10-index have been computed by Google Scholar.

8. Janet Feigenspan, Christian Kästner, Jörg Liebig, Sven Apel, and Stefan Hanenberg. Measuring and Modeling Programming Experience. *Empirical Software Engineering (EMSE)*, 19(5):1299–1334, October 2014.
7. Thomas Thüm, Sven Apel, Christian Kästner, Ina Schaefer, and Gunter Saake. A Classification and Survey of Analysis Strategies for Software Product Lines. *ACM Computing Surveys*, 47(1):6:1–6:45, June 2014.
6. Janet Feigenspan, Christian Kästner, Sven Apel, Jörg Liebig, Michael Schulze, Raimund Dachsel, Maria Papendieck, Thomas Leich, and Gunter Saake. Do Background Colors Improve Program Comprehension in the #ifdef Hell? *Empirical Software Engineering (EMSE)*, 18(4):699–745, July 2013.
5. Sven Apel, Christian Kästner, and Christian Lengauer. Language-Independent and Automated Software Composition: The FeatureHouse Experience. *IEEE Transactions on Software Engineering (TSE)*, 39(1):63–79, January 2013.
4. Christian Kästner, Sven Apel, Thomas Thüm, and Gunter Saake. Type Checking Annotation-Based Product Lines. *ACM Transactions on Software Engineering and Methodology (TOSEM)*, 21(3):14:1–14:39, June 2012.
3. Friedrich Steimann, Thomas Pawlitzki, Sven Apel, and Christian Kästner. Types and Modularity for Implicit Invocation with Implicit Announcement. *ACM Transactions on Software Engineering and Methodology (TOSEM)*, 20(1):1:1–1:43, June 2010.
2. Sven Apel and DeLesley Hutchins. A Calculus for Uniform Feature Composition. *ACM Transactions on Programming Languages and Systems (TOPLAS)*, 32(5):19:1–19:33, May 2010.
1. Sven Apel, Thomas Leich, and Gunter Saake. Aspectual Feature Modules. *IEEE Transactions on Software Engineering (TSE)*, 34(2):162–180, April 2008.

Refereed Conference Papers (selected)

29. Olaf LeBenich, Sven Apel, Christian Kästner, Georg Seibt, and Janet Siegmund. Renaming and Shifted Code in Structured Merging: Looking Ahead for Precision and Performance. In *Proceedings of the IEEE/ACM International Conference on Automated Software Engineering (ASE)*, pages 543–553. IEEE Computer Society, November 2017. Acceptance rate (full papers): 21% (67 / 322).
28. Norbert Siegmund, Stefan Sobernig, and Sven Apel. Attributed Variability Models: Outside the Comfort Zone. In *Proceedings of the European Software Engineering Conference and the ACM SIGSOFT International Symposium on the Foundations of Software Engineering (ESEC/FSE)*, pages 268–278. ACM Press, September 2017. Acceptance rate: 24% (72 / 295).
27. Vivek Nair, Tim Menzies, Norbert Siegmund, and Sven Apel. Using Bad Learners to find Good Configurations. In *Proceedings of the European Software Engineering Conference and the ACM SIGSOFT International Symposium on the Foundations of Software Engineering (ESEC/FSE)*, pages 257–267. ACM Press, September 2017. Acceptance rate: 24% (72 / 295).
26. Janet Siegmund, Norman Peitek, Chris Parnin, Sven Apel, Johannes Hofmeister, Christian Kästner, Andrew Begel, Anja Bethmann, and André Brechmann. Measuring Neural Efficiency of Program Comprehension. In *Proceedings of the European Software Engineering Conference and the ACM SIGSOFT International Symposium on the Foundations of Software Engineering (ESEC/FSE)*, pages 140–150. ACM Press, September 2017. Acceptance rate: 24% (72 / 295).
25. Mitchell Joblin, Sven Apel, Claus Hunsen, and Wolfgang Mauerer. Classifying Developers into Core and Peripheral: An Empirical Study on Count and Network Metrics. In *Proceedings of the IEEE/ACM International Conference on Software Engineering (ICSE)*, pages 164–174. IEEE Computer Society, May 2017. Acceptance rate: 16% (68 / 415).
24. Sven Apel, Dirk Beyer, Vitaly Mordan, Vadim Mutilin, and Andreas Stahlbauer. On-The-Fly Decomposition of Specifications in Software Model Checking. In *Proceedings of the ACM SIGSOFT International Symposium on the Foundations of Software Engineering (FSE)*, pages 349–361. ACM Press, November 2016. Acceptance rate: 27% (74 / 273).
23. Flávio Medeiros, Christian Kästner, Márcio Ribeiro, Rohit Gheyi, and Sven Apel. A Comparison of 10 Sampling Algorithms for Configurable Systems. In *Proceedings of the ACM/IEEE International Conference on Software Engineering (ICSE)*, pages 643–654. ACM Press, May 2016. Acceptance rate: 19% (101 / 530).

22. Andreas Wölfel, Norbert Siegmund, Sven Apel, Harald Kosch, Johann Krautlager, and Guillermo Weber-Urbina. Generating Qualifiable Avionics Software: An Experience Report. In *Proceedings of the IEEE/ACM International Conference on Automated Software Engineering (ASE)*, pages 726–736. IEEE Computer Society, November 2015. Acceptance rate (full papers): 21% (60 / 289).
21. Atri Sarkar, Jianmei Guo, Norbert Siegmund, Sven Apel, and Krzysztof Czarnecki. Cost-Efficient Sampling for Performance Prediction of Configurable Systems. In *Proceedings of the IEEE/ACM International Conference on Automated Software Engineering (ASE)*, pages 342–352. IEEE Computer Society, November 2015. Acceptance rate (full papers): 21% (60 / 289).
20. Norbert Siegmund, Alexander Grebhahn, Sven Apel, and Christian Kästner. Performance-Influence Models for Highly Configurable Systems. In *Proceedings of the European Software Engineering Conference and the ACM SIGSOFT International Symposium on the Foundations of Software Engineering (ESEC/FSE)*, pages 284–294. ACM Press, August 2015. Acceptance rate: 25% (74 / 291).
19. Janet Siegmund, Norbert Siegmund, and Sven Apel. Views on Internal and External Validity in Empirical Software Engineering. In *Proceedings of the IEEE/ACM International Conference on Software Engineering (ICSE)*, pages 9–19. IEEE Computer Society, May 2015. Acceptance rate: 19% (84 / 452); **ACM SIGSOFT Distinguished Paper Award**.
18. Alexander von Rhein, Alexander Grebhahn, Sven Apel, Norbert Siegmund, Dirk Beyer, and Thorsten Berger. Presence-Condition Simplification in Highly Configurable Systems. In *Proceedings of the IEEE/ACM International Conference on Software Engineering (ICSE)*, pages 178–188. IEEE Computer Society, May 2015. Acceptance rate: 19% (84 / 452).
17. Jörg Liebig, Andreas Janker, Florian Garbe, Sven Apel, and Christian Lengauer. Morpheus: Variability-Aware Refactoring in the Wild. In *Proceedings of the IEEE/ACM International Conference on Software Engineering (ICSE)*, pages 380–391. IEEE Computer Society, May 2015. Acceptance rate: 19% (84 / 452).
16. Mitchell Joblin, Wolfgang Mauerer, Sven Apel, Janet Siegmund, and Dirk Riehle. From Developer Networks to Verified Communities: A Fine-Grained Approach. In *Proceedings of the IEEE/ACM International Conference on Software Engineering (ICSE)*, pages 563–573. IEEE Computer Society, May 2015. Acceptance rate: 19% (84 / 452).
15. Jianmei Guo, Edward Zulkoski, Rafael Olaechea, Derek Rayside, Krzysztof Czarnecki, Sven Apel, and Joanne Atlee. Scaling Exact Multi-Objective Combinatorial Optimization by Parallelization. In *Proceedings of the ACM/IEEE International Conference on Automated Software Engineering (ASE)*, pages 409–420. ACM Press, September 2014. Acceptance rate: 20% (55 / 276).
14. Janet Siegmund, Christian Kästner, Sven Apel, Chris Parnin, Anja Bethmann, Thomas Leich, Gunter Saale, and André Brechmann. Understanding Understanding Source Code with Functional Magnetic Resonance Imaging. In *Proceedings of the ACM/IEEE International Conference on Software Engineering (ICSE)*, pages 378–389. ACM Press, May 2014. Acceptance rate: 20% (99 / 495).
13. Andreas Simbürger, Sven Apel, Armin Größlinger, and Christian Lengauer. The Potential of Polyhedral Optimization: An Empirical Study. In *Proceedings of the IEEE/ACM International Conference on Automated Software Engineering (ASE)*, pages 508–518. IEEE Computer Society, November 2013. Acceptance rate (full papers): 16% (51 / 317).
12. Jianmei Guo, Krzysztof Czarnecki, Sven Apel, Norbert Siegmund, and Andrzej Wasowski. Variability-Aware Performance Prediction: A Statistical Learning Approach. In *Proceedings of the IEEE/ACM International Conference on Automated Software Engineering (ASE)*, pages 301–311. IEEE Computer Society, November 2013. Acceptance rate (full papers): 16% (51 / 317).
11. Jörg Liebig, Alexander von Rhein, Christian Kästner, Sven Apel, Jens Dörre, and Christian Lengauer. Scalable Analysis of Variable Software. In *Proceedings of the European Software Engineering Conference and the ACM SIGSOFT International Symposium on the Foundations of Software Engineering (ESEC/FSE)*, pages 81–91. ACM Press, August 2013. Acceptance rate: 20% (51 / 251).
10. Sven Apel, Alexander von Rhein, Philipp Wendler, Armin Größlinger, and Dirk Beyer. Strategies for Product-Line Verification: Case Studies and Experiments. In *Proceedings of the IEEE/ACM International Conference on Software Engineering (ICSE)*, pages 482–491. IEEE Computer Society, May 2013. Acceptance rate: 19% (85 / 461).

9. Sven Apel, Olaf Leßenich, and Christian Lengauer. Structured Merge with Auto-Tuning: Balancing Precision and Performance. In *Proceedings of the IEEE/ACM International Conference on Automated Software Engineering (ASE)*, pages 120–129. ACM Press, September 2012. Acceptance rate: 13% (21 / 167).
8. Norbert Siegmund, Sergiy Kolesnikov, Christian Kästner, Sven Apel, Don Batory, Marko Rosenmüller, and Gunter Saake. Predicting Performance via Automated Feature-Interaction Detection. In *Proceedings of the IEEE/ACM International Conference on Software Engineering (ICSE)*, pages 167–177. IEEE Computer Society, June 2012. Acceptance rate: 21% (87 / 408).
7. Sven Apel, Jörg Liebig, Benjamin Brandl, Christian Lengauer, and Christian Kästner. Semistructured Merge: Rethinking Merge in Revision Control Systems. In *Proceedings of the European Software Engineering Conference and the ACM SIGSOFT International Symposium on the Foundations of Software Engineering (ESEC/FSE)*, pages 190–200. ACM Press, September 2011. Acceptance rate: 17% (34 / 203).
6. Sven Apel and Dirk Beyer. Feature Cohesion in Software Product Lines: An Exploratory Study. In *Proceedings of the ACM/IEEE International Conference on Software Engineering (ICSE)*, pages 421–430. ACM Press, May 2011. Acceptance rate: 14% (62 / 441).
5. Jörg Liebig, Sven Apel, Christian Lengauer, Christian Kästner, and Michael Schulze. An Analysis of the Variability in Forty Preprocessor-Based Software Product Lines. In *Proceedings of the ACM/IEEE International Conference on Software Engineering (ICSE)*, pages 105–114. ACM Press, May 2010. Acceptance rate: 14% (52 / 380).
4. Sven Apel, Christian Kästner, and Christian Lengauer. FeatureHouse: Language-Independent, Automated Software Composition. In *Proceedings of the IEEE/ACM International Conference on Software Engineering (ICSE)*, pages 221–231. IEEE Computer Society, May 2009. Acceptance rate: 12% (50 / 405).
3. Christian Kästner and Sven Apel. Type-checking Software Product Lines – A Formal Approach. In *Proceedings of the IEEE/ACM International Conference on Automated Software Engineering (ASE)*, pages 258–267. IEEE Computer Society, September 2008. Acceptance rate: 12% (30 / 280).
2. Christian Kästner, Sven Apel, and Martin Kuhlemann. Granularity in Software Product Lines. In *Proceedings of the ACM/IEEE International Conference on Software Engineering (ICSE)*, pages 311–320. ACM Press, May 2008. Acceptance rate: 15% (56 / 371).
1. Sven Apel, Thomas Leich, and Gunter Saake. Aspectual Mixin Layers: Aspects and Features in Concert. In *Proceedings of the ACM/IEEE International Conference on Software Engineering (ICSE)*, pages 122–131. ACM Press, May 2006. Acceptance rate: 9% (36 / 395).