

## Curriculum Vitae: Andreas Zeller

Born October 28, 1965 in Hanau, Germany

CISPA Helmholtz Center for Information Security  and Saarland University , Saarbrücken, Germany

ACM Fellow · Five 10-Year Impact Paper awards · 19,500+ citations · h-index  $\geq 60$

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### Education

1997 Ph.D. in Computer Science, TU Braunschweig (summa cum laude)

1991 Diploma in Computer Science, TU Darmstadt (passed with distinction)

### Positions

2019–present Faculty, CISPA Helmholtz Center for Information Security, Germany

2003–present Full Professor, Computer Science, Saarland University, Germany

2001–2003 Associate Professor (C3), Computer Science, Saarland University, Germany

1999–2001 Post-Doc Researcher (C1), Computer Science, Passau University, Germany

1997–1999 Post-Doc Researcher (C1), Computer Science, TU Braunschweig, Germany

1991–1997 Scientific Assistant, Computer Science, TU Braunschweig, Germany

Guest researcher/lecturer at Microsoft Research, Redmond, USA (2011, 2009, 2005); ETH Zürich, Switzerland (2007); and University of Washington, USA (2005).

### Career-Long Contribution Awards

2019 **IFIP Fellow** (IFIP’s recognition of substantial and enduring contributions to the ICT industry)

2018 **ACM SIGSOFT Outstanding Research Award** (The highest research award by ACM SIGSOFT, the ACM special interest group on software engineering)

2010 **ACM Fellow** (ACM’s most prestigious member grade recognizing the top 1% of members for their outstanding accomplishments) as the youngest European researcher ever, for “contributions to automated debugging and mining software archives”, two fields I helped to shape.

### Impact Awards

2020 **ISSTA 2020 Impact Paper Award** (the single ISSTA 2010 paper with the highest impact) for “Mutation-driven generation of unit tests and oracles” (with Gordon Fraser)

2017 **MSR 10-Year Most Influential Paper Award** (the single MSR 2007 paper with the highest impact) for “How Long Will It Take to Fix This Bug?” (with Cathrin Weiß, Rahul Premraj, and Thomas Zimmermann)

2015 **MSR 10-Year Most Influential Paper Award** (the single MSR 2005 paper with the highest impact) for “When do Changes induce Fixes?” (with Jacek Śliwerski and Thomas Zimmermann)

2015 **ICSE 10-Year Most Influential Paper Award, Official Runner-Up** (one of two ICSE 2005 papers with the second highest 10-year impact) for “Locating Causes of Program Failures” isolating cause-effect chains in failing programs (with Holger Cleve)

2014 **ICSE 10-Year Most Influential Paper Award** (the single ICSE 2004 paper with the highest 10-year impact) for “Mining Software Histories to Guide Software Changes” introducing mining software repositories (with Thomas Zimmermann, Peter Weißgerber, and Stephan Diehl)

2009 **ACM SIGSOFT 10-Year Impact Award** (the single 1999 software engineering paper with the highest 10-year impact) for “Yesterday, my program worked. Today, it does not. Why?” introducing Delta Debugging (single author).

## Significant Grants

2011 **ERC Advanced Grant** (Europe's highest funding for individual researchers) of 2.2 million € for "Specification Mining and Testing (SPECMATE)"

2011 **Google Focused Research Award** (750,000 US\$) for "Test Amplification"

## Supervision of Graduate Students and Postdoctoral Fellows

2001–present 15 Ph.D.s completed, 6 Ph.D.s to complete in 2021, 9 Ph.D.s currently supervised  
9 Post-Docs completed, 3 Post-Docs currently associated, all at CISPA and Saarland U

## Teaching Activities

2019 Textbook "The Fuzzing Book" (with Gopinath, Böhme, Fraser, Holler)  
2018–present Course of Studies "Entrepreneurial Cybersecurity" (Saarland Teaching Award 2020)  
2012 Udacity Online Course CM259 "Software Debugging" (commissioned by Udacity)  
2005 Textbook "Why Programs Fail", Morgan Kaufmann Editors  
1997–present Courses on Software Engineering, Introduction to Programming, Program Analysis, Software Testing, Security Testing, Automated Debugging.

## Organization of Scientific Meetings

2022 **Program Chair** ACM/IEEE International Conference on Software Engineering (ICSE 2022; co-chaired with Daniela Damian)  
2020 **Program Chair** IEEE International Conference on Software Testing and Verification (ICST 2020; co-chaired with Corina Păsăreanu)  
2016 **General Chair** IEEE European Symposium on Security and Privacy (EuroS&P 2016)  
2016 **General Chair** ACM International Symposium on Software Testing and Analysis (ISSTA 2016)  
2013 **Program Chair** ACM/IEEE International Conference on Automated Software Engineering (ASE 2013; co-chaired with Tevfik Bultan)  
2011 **Program Chair** European Conference on Software Engineering / ACM SIGSOFT Foundations of Software Engineering (ESEC/FSE 2011)

Co-Organizer of four Dagstuhl Seminars in the past ten years (2010, 2011, 2015, 2017).

## Institutional Responsibilities

2016–2018 Elected member, Saarland University Senate  
2008–2018 Scientific Vice-Coordinator, Saarbrücken Graduate School for Computer Science  
2001–2018 Head of the Software Engineering Chair at Saarland University  
Position offers from Mannheim, Hannover, Zürich, and Karlsruhe

## Commissions of Trust

2018–present Steering Committee, International Conference on Software Engineering (ICSE)  
2016–present Research Highlights Editorial Board, Communications of the ACM  
2016–present Editorial Board, Journal of Software Testing, Verification and Reliability  
2008–present Steering Committee, Int. Symposium on Software Testing and Analysis (ISSTA)  
2011–2020 National DFG Proposal Review Panel for Computer Science, Elected Member  
2013–2017 Editorial Board, IEEE Transactions on Software Engineering (TSE)  
2009–2017 Editorial Board, Springer Journal on Empirical Software Engineering (ESEM)  
2011–2016 Steering Committee, European Software Engineering Conference (ESEC)