

Ute Schmid

Personal data

Name and academic title: Prof. Dr. Ute Schmid
Date of birth: Januar 24, 1965
Institution: Faculty Information Systems and Applied
Computer Science, University of Bamberg
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Current position: Professor (C3)



Academic Education and Degrees

2002 Habilitation, *venia legendi* for Computer Science at TU Berlin
1994 Doctoral degree (Dr. rer. nat.) at TU Berlin (*summa cum laude*)
1989-1994 Study of Computer Science at TU Berlin
Diplom (M.Sc.) 1994, Vordiplom (B.Sc.) 1992
1984-1989 Study of Psychology at TU Berlin and EWH Landau
Diplom (M.A.) 1989 at TU Berlin, Vordiplom (B.A.) at EWH Landau

Professional Experience

since 9/2004 Professorship (C3) for Applied Computer Science/Cognitive Systems,
Faculty Information Systems and Applied Computer Science, University of
Bamberg, Germany
since 2019 fortiss research fellow for Inductive Programming
since 2020 Board member of the Bavarian Institute on Digital Transformation (bidt)
since 2020 Head of the Fraunhofer IIS research group Explainable AI
8/2003–8/2004 Parental Leave
2001–2004 Lecturer (Akademische Rätin), Department Mathematics and Computer
Science, University of Osnabrück, Germany
Adjunct Member of the Institute of Cognitive Science
10/1998-3/1999 DFG Research Fellowship, Carnegie-Mellon University, Pittsburgh, PA
3/2000-8/2000
1994–2001 Assistent Professor (Wissenschaftliche Assistentin, C1), Department of
Computer Science, TU Berlin, Methods of AI Group
1989–1994 Teaching/Research Assistant (Wissenschaftliche Mitarbeiterin) General
Psychology, Institute of Psychology, TU Berlin
1989 Research Assistant (Wissenschaftliche Mitarbeiterin), in the DFG Research
Unit „Konstruktionshandel“

Selected current research projects

- Dependable Intelligent Systems Lab (DISL), BMBF Joint Project, funding line “AI Labs”, since Feb 2020, 24 month (1 full position, material and travel) with three partners from AI and Software Engineering
- Transparent Medical Expert Companion, BMBF Joint Project, funding line “AI projects”, since Oct 2018, 36 month (1 full position, material and travel) with Fraunhofer IIS and Fraunhofer HHI.
- Video-based automated pain detection exploiting compositional and temporal characteristics of action units (PainFaceReader), DFG with a university partner in

psychology and Fraunhofer IIS, since Oct. 2018, 36 month (1 full position, material and travel)

- Dare2Del: Learning to Delete: Forgetting of Digital Objects as Collaborative Task of Human and AI, DFG with a partner from work psychology, University of Erlangen, DFG priority program „Intentional Forgetting (SPP 9221), since Oct 2019, 36 month (1 full position, material and travel)

Selected relevant publications

- 1) Ai, L., Muggleton, S. H., Hocquette, C., Gromowski, M., & **Schmid, U.** (2020). Beneficial and Harmful Explanatory Machine Learning. *arXiv preprint arXiv:2009.06410*. To appear in Machine Learning.
- 2) **Schmid, U.**, & Finzel, B. (2020). Mutual Explanations for Cooperative Decision Making in Medicine. *KI-Künstliche Intelligenz*, 34(2), 227-233.
- 3) Muggleton, S., **Schmid, U.**, Zeller, C., Tamaddoni-Nezhad, A., Besold, T. (2018). Ultra-strong machine learning - comprehensibility of programs learned with ILP. *Machine Learning*, 107(7), 1119–1140. (doi:10.1007/s10994-018-5707-3, Journal Impact Factor: 2.809)
- 4) Hernandez-Orallo, J., Martnez-Plumed, F., **Schmid, U.**, Siebers, M., Dowe, D.L. (2016). Computer Models Solving Intelligence Test Problems: Progress and Implications. *Artificial Intelligence*, Vol. 230, 74-107. (doi:10.1016/j.artint.2015.09.011, Journal Impact Factor: 6.628)
- 5) Siebers, M., **Schmid, U.**, Seuß, D., Kunz, M., Lautenbacher, S. (2016). Characterizing Facial Expressions By Grammars of Action Unit Sequences -- A First Investigation Using ABL. *Information Sciences*. Vol 329, 866-875. (doi:10.1016/j.ins.2015.10.007, Journal Impact Factor: 5.524)
- 6) Gulwani, S., Hernández-Orallo, J., Kitzelmann, E., Muggleton, S., **Schmid, U.**, and Zorn, B. (2015). Inductive Programming Meets the Real World, *Communications of the ACM*, 58(11), 90-99. (doi: 10.1145/2736282, Journal Impact Factor: 4.55)
- 7) **Schmid, U.** & Kitzelmann, E. (2011). Inductive Rule Learning on the Knowledge Level. *Cognitive Systems Research*, 12, 3, 23-248. (doi:10.1016/j.cogsys.2010.12.00, Journal Impact Factor: 1.952)
- 8) Flener, P. & **Schmid, U.** (2009). An Introduction to Inductive Programming. *Artificial Intelligence Review*, 29 (1), 45-62. (doi: 10.1007/s10462-009-9108-7, Journal Impact Factor: 5.747)
- 9) Gust, H., Kühnberger, K.-U., & **Schmid, U.** (2006). Metaphors and heuristic-driven theory projection (HOTP). *Theoretical Computer Science*, 354 (1), 98-117. (doi:10.1016/j.tcs.2005.11.009, Journal Impact Factor: 0.718)
- 10) Kitzelmann, E. & **Schmid, U.** (2006). Inductive Synthesis of Functional Programs – An Explanation-Based Generalization Approach, *Journal of Machine Learning Research*, 7, 429-454 (www.jmlr.org/papers/v7/kitzelmann06a.html, Journal Impact Factor: 4.091)