

## Short CV – Prof. Dr.-Ing. Christian Martin

Christian Martin, born in 1958, is a professor of computer architecture and intelligent systems at the faculty of computer science at Augsburg University of Applied Sciences. His main areas of interest are human-computer interaction, intelligent systems, computer architecture and software engineering. He was a member of the university senate from 1999 to 2013 and the senate's chairman from 2007 to 2013.

He holds a Ph.D. (Dr.-Ing.) degree in computer science from the University of Rostock, Germany, and a Diplom-Informatiker degree (M.Sc. in computer science) from the Friedrich-Alexander-University of Erlangen-Nürnberg, Germany.

Christian Martin is the head of the Automation in Usability Engineering (AUE) research group. His main current research activities are in the fields of model- and pattern-based user interface development environments, situation- and context-aware adaptive systems, intelligent video-assist-technology for the film business and software-based support systems for elderly people. In these areas he is both active in national funded research projects and co-operations with the industry. From 2004 to 2013 he was a member of two EU-COST actions on usability evaluation (MAUSE) and on the integration of software engineering and user experience design (TwinTide).

Before joining the university in 1990, Christian Martin has worked as a computer and operating systems developer at TA Triumph-Adler AG, Nürnberg, where he later was project manager for AI and computer-architecture-related research activities. From 1988 to 1990 he was the head of the human-computer interaction group at the AI Lab of Olivetti Research in Nürnberg. In parallel to his professorship he is consulting industry with the introduction of new information technologies.

Christian Martin is author of three textbooks on computer architecture and of more than 130 papers and research reports, mostly on HCI and software engineering topics. He is a member of ACM, IEEE, and Gesellschaft für Informatik (GI). Christian Martin has organized and chaired sessions at HCII 2009, 2011, 2013, 2014, 2016 and 2017. He is a program committee member for the INTERACT and EICS conferences and serves as a reviewer for international conferences, workshops, journals and funded research projects.

### Recent Publications (Selection)

Martin, C., Herdin, C., Engel, J.: Model-based User-Interface Adaptation by Exploiting Situations, Emotions and Software Patterns, Proc. CHIRA 2017, Funchal, Madeira, Portugal, 31 October-2 November, SCITEPRESS (2017)

Herdin, C., Martin, C., Forbrig, P.: SitAdapt: An architecture for situation-aware runtime adaptation of interactive systems. Masaaki Kurosu (Ed.): Human-Computer Interaction: User Interface Design, Development and Multimodality. Proc. HCI International 2017, Vancouver, BC, Canada, 9-14 July, Part I, Springer LNCS 10271, pp. 447-455

Engel, J., Martin, C., Forbrig, P.: Practical Aspects of Pattern-supported Model-driven User Interface Generation. Masaaki Kurosu (Ed.): Human-Computer Interaction: User Interface Design, Development and Multimodality. Proc. HCI International 2017, Vancouver, BC, Canada, 9-14 July, Part I, Springer LNCS 10271, pp. 397-414

Martin, C., Herdin, C., Rashid, S.: Situationsbewusste, patternbasierte Adaption interaktiver Anwendungen durch Auswertung von Emotions-Daten, in: Mayr, H.C., Pinzger, M. (Eds.) INFORMATIK 2017, Klagenfurt, 26.-30. September, pp. 1879-1884, Gesellschaft für Informatik, 2016

Martin, C., Rashid, S., Herdin, C.: Designing Responsive Interactive Applications by Emotion-Tracking and Pattern-based Dynamic User Interface Adaptation. Masaaki Kurosu (Ed.): Human-Computer Interaction. Novel User Experiences, Proc. of HCII 2016, Toronto, ON, Canada, 17-22 July, Part III, Springer LNCS 9733, 2016, pp. 28-36

Engel, J., Märtin, C., Forbrig, P.: A Unified Pattern Specification Formalism to Support User Interface Generation. Masaaki Kurosu (Ed.): Human-Computer Interaction: Theory, Design, Development and Practice, Proc. of HCII 2016, Toronto, 17-22 July, Part I, Springer LNCS 9731, 2016, pp. 445-456

Forbrig, P., Märtin, C.: Elaboration on Terms and Techniques for Reuse of Submodels for Task and Workflow Specifications. In: Masaaki Kurosu (Ed.): Human-Computer Interaction: Theory, Design, Development and Practice, Proc. of HCII 2016, Toronto, 17-22 July, Part I, Springer LNCS 9731, 2016, pp. 467-475

Engel, J., Märtin, C., Forbrig, P.: A Concerted Model-driven and Pattern-based Framework for Developing User Interfaces of Interactive Ubiquitous Applications, Proc. Workshop on Large-scale and model-based Interactive Systems: Approaches and Challenges, June 23, 2015, Duisburg, Germany, pp. 35-41

Engel, J., Herdin, C., Märtin, C.: A Review of HCI Pattern Tools, Proc. IHCI 2015, Las Palmas de Gran Canaria, Spain, July 22-24, IADIS Press, 2015, pp. 51-58

Märtin, C., Stein, A., Prell, B., Kesper, A.: HCI-Patterns for Developing Mobile Apps and Digital Video-Assist-Technology for the Film Set, Proc. of HCII 2014, Heraklion, Crete, 22-27 June, 2014, Springer LNCS, HCI (I), pp. 320-330

Engel, J., Herdin, C., Märtin, C.: Evaluation of Model-based User Interface Development Approaches, Proc. of HCII 2014, Heraklion, Crete, 22-27 June, 2014, Springer LNCS, HCI(I), pp. 295-307

Märtin, C.: Multicore Processors: Challenges, Opportunities, Emerging Trends, Invited Session Keynote, Proceedings Embedded World Conference 2014, 25-27 February, 2014, Nuremberg, Germany, Design & Elektronik, 2014

Märtin, C., Herdin, C., Engel, J.: Patterns and Models for Automated User Interface Construction – In Search of the Missing Links, in: M. Kurosu (Ed.), Human-Computer Interaction, Part I, HCII 2013, Las Vegas, U.S.A., LNCS 8004, pp. 401-410, Springer, Heidelberg (2013)

Engel, J., Herdin, C., Märtin, C., Forbrig, P.: Formal Pattern Specifications to Facilitate Semi-Automated User Interface Generation, in: M. Kurosu (Ed.), Human-Computer Interaction, Part I, HCII 2013, Las Vegas, U.S.A., LNCS 8004, pp. 300-309, Springer, Heidelberg (2013)

Forbrig, P., Märtin, C., Zaki, M.: Special Challenges for Models and Patterns in Smart Environments, in: M. Kurosu (Ed.), Human-Computer Interaction, Part I, HCII 2013, Las Vegas, U.S.A., LNCS 8004, pp. 340-349, Springer, Heidelberg (2013)

Engel, J., Herdin, C., Märtin, C.: Exploiting HCI Pattern Collections for User Interface Generation, Proc. Patterns 2012 (Nice, France), IARIA 2012, pp. 36-44, available at [http://www.thinkmind.org/index.php?view=article&articleid=patterns\\_2012\\_2\\_20\\_70024](http://www.thinkmind.org/index.php?view=article&articleid=patterns_2012_2_20_70024), last website call on September 23, 2012 (Best Paper Award at Patterns 2012)

Engel, J., Herdin, C., Märtin, C.: A Task and Pattern-based Modeling Approach for Knowledge Sharing Systems. In: Forbrig, P., Dittmar, A. (Eds.) Designing Collaborative Activities, Proc. ECCE 2011, August 24-26, 2011, Rostock, Germany, pp. 275-276

Kaelber, C., Märtin, C.: From Structural Analysis to Scenarios and Patterns for Knowledge Sharing Applications, in: J.A. Jacko (Ed.): Human-Computer Interaction, Part I, HCII 2011, Orlando, U.S.A., LNCS 6761, Springer-Verlag Berlin Heidelberg 2011, pp. 258-267

Engel, J., Märtin, C., Forbrig, P.: HCI Patterns as a Means to Transform Interactive User Interfaces to Diverse Contexts of Use, in: J.A. Jacko (Ed.): Human-Computer Interaction, Part I, HCII 2011, Orlando, U.S.A., LNCS 6761, Springer-Verlag Berlin Heidelberg 2011, pp. 204-213