Prof. Dr.-Ing.
KATRIN WOLF

Professor for Media Technology
BTK – University of Art and Design
Bernburger Str. 24/25
10973 Berlin, Germany

Private address:
Katrin Wolf
Katharinenstraße 4
70182 Stuttgart, Germany

phone: +49 176 81978982
e-mail: katrin.wolf@vis.uni-stuttgart.de
personal page: http://katrinwolf.info

CONTENT

CURRICULUM VITAE

Katrin Wolf is a professor for Media Informatics at the BTK, the University of Art and Design in Berlin. Before she was a postdoctoral researcher in the Human Computer Interaction Group at the University of Stuttgart, where she worked in the meSch project on projected guidance systems and in the RECALL project on lifelogging video navigation.

Beforehand Katrin was a researcher and doctoral student at the Telekom Innovation Laboratories at the Technical University of Berlin. After receiving a diploma degree in Society and Economics Communications and Design, she worked for the European research project EMIKA at the Jewish Museum Berlin in cooperation with the University of Applied Science Berlin on developing a mobile multimedia guide for the museum. Particularly, she is interested in motion and gesture based interaction for mobile and ubiquitous computing.

Katrin published about 40 peer-reviewed papers in scientific journals and conferences. She organized scientific workshops, served as program committee member and has been reviewer for leading conferences in her field. Katrin lectures interaction design as well as human-computer interaction in practical and theoretical courses for several years. She supervised more than 10 Bachelor and Master theses concerning the development of evaluation of grasp-based and microgesture interaction with mobile devices as well as with everyday objects.

EMPLOYMENT

Professor for Media Technology and Vice Dean for Research at BTK – University of Art and Design	From 01.10.2015
Postdoctoral researcher, Human-Computer Interaction Group, Institute for Visualization and Interactive Systems Simulation Technology Cluster of Excellence, University of Stuttgart, Germany	03.01.2014 - 30.09.2015
PhD student, Mobile and Physical Interaction Group, Telekom Innovation Laboratories, Technical University Berlin, Germany	01.07.2010 - 28.02.2014
Internship in the Multimodal Interaction Group at Glasgow University with Stephen Brewster	10.09.2011 - 21.12.2011
Internship at the Commonwealth Scientific and Industrial Research Organisation (CSIRO) Sydney with Christian Müller-Tomfelde	21.02.2011 - 17.06.2011
Internship at Human Interface Technology (HIT) Lab New	01.01.2010

Zealand, Christchurch, with Mark Billinghurst | - 30.06.2010

Research Assistant at the Institute of Electronic Business, University of the Arts Berlin	01.09.2008 - 30.06.2009
Interface & Media Designer at the Jewish Museum Berlin	01.03.2007 - 31.08.2008
Student research assistant, CLIO DFG research project, Humboldt University of Berlin, Germany	01.05.2002 - 15.11.2002

EDUCATION

PhD thesis in Computer Science (magma cum laude), Technical University Berlin, Title: "Grasp Interaction with Tablets" Advisor: Prof. Dr.-Ing. Sebastian Möller, Technical University Berlin, Germany	29.09.2014
SUN Certified Java SE 6 Programmer	26.10.2009
Certificate in "Mobile Computing" of the University of Applied Science Berlin	23.07.2008
Diplom in Communications of the University of the Arts Berlin	05.12.2007
Diplom in Electronic Business Design of the University of the Arts Berlin	17.11.2004
Abitur (German A-Level), Karl-Friedrich-Schinkel Gymnasium Neuruppin	24.06.1995

PROGRAM COMMITTEES & ORGANIZATION

Poster Chair at the The 15th International Conference on Mobile and Ubiquitous Multimedia (MUM 2016)

Studio Chair at the International Conference on Tangible, Embedded and Embodied Interaction (TEI 2017)

Program Committee member at the The 15th International Conference on Mobile and Ubiquitous Multimedia (MUM 2016)

Program Committee member at the International Conference on Human-Computer Interaction with Mobile Devices and Services (MobileHCI 2016)

Program Committee member at the International Conference on Electronic Visualisation and the Arts London (EVA London 2016)

Demo Chair at the International Conference on Tangible, Embedded and Embodied Interaction (TEI) 2016

Program Committee member at The 14th International Conference on Mobile and Ubiquitous Multimedia (MUM 2015)

Program Committee member at the Workshop on Affective Touch (WAT'15)

at The Sixth biannual Humaine Association Conference on Affective Computing and Intelligent Interaction (ACII 2015)

Poster Chair at the Mensch und Computer (MUC) conference 2015

Organizer of the workshop on Interactive Personal Displays through Mobile Projection, at the MobileHCI conference 2015

PC Member at the ACM Interactive Tabletops and Surfaces (ITS) Conference 2014

PC Member at the International Conference on Tangible, Embedded and Embodied Interaction (TEI) 2014

Co-Organizer of the workshop on Gesture-based Human-Computer Interaction at the Ambient Assistant Living (AAL) Congress 2012

Co-Organizer of the workshop on Body, Movement, Gestures and Tactility in Interaction with Mobile Devices, at the MobileHCI conference 2011

REVIEWING DUTIES

International Conference on Human Factors in Computing Systems (CHI)	2012-16
ACM Conference on Designing Interactive Systems (DIS)	2014, 2016
EuroHaptics	2014
i-com: Be-greifbare Interaktion	2012
IEEE Transactions on Human-Machine Systems (THMS)	2015
Interacting with Computers Journal	2014
International Conference on Interactive Tabletops and Surfaces (ITS)	2012-14
International Conference on Human-Computer Interaction with Mobile Devices and Services (MobileHCI)	2012-16
International Conference on 'Mobile and Ubiquitous Multimedia' (MUM)	2013, 2015-2016
Nordic Conference on Human-Computer Interaction (NordiCHI)	2014
International Conference on Tangible, Embedded and Embodied Interaction (TEI)	2013-16
International Conference on Ubiquitous Computing (UbiComp)	2014
ACM Symposium on User Interface Software and Technology (UIST)	2013, 2015

INVITED TALKS

Culture Lab, Newcastle, UK, 2015

Deutsches Kulturerbe auf dem Weg in die Europeana II, Berlin, 2014: meSch: A platform for designing tangible and embedded interaction in exhibitions

Human-Centered Technology (IHTE), Tampere University of Technology, 2014: Tablet Interaction with Grasping Hands

Interaction Lab at Holon Institute of Technology (HIT), Tel Aviv, 2014: Interaction with Grasping Hands

University of Oldenburg, Media Informatics and Multimedia Systems Group, 2013: Ergonomics of grasp- and touch-based interaction

ACM SIGCHI Paris Chapter, Télécom ParisTech, 2013: Microinteractions: Finger mounted sensors for ubiquitous and busy-hand interfaces

University College London (UCL) Interaction Centre, 2013: Grasp-based interaction

AAL Congress Berlin. Workshop on Gesture-based Interactions, 2012: Technologien der Gesten-basierten Mensch-Computer-Interaktion

Glasgow University. GIST Talk, 2011: Microinteractions: Flexible grips for gesture-based interacting

Sydney University. Design Lab, 2011: Augmenting manual grasping tasks through microinteractions

Quality & Usability Laboratories. Research Colloquium, TU Berlin, 2010

TEACHING ACTIVITIES

Katrin Wolf taught using different methods and with different colleagues and professors. She interweaves practical work and theoretical background. In particular, she is interested in human-computer interaction, interactive devices and products, multimodal interaction, and tactile and visual perception as these areas are of high practical value and have the potential to re-shape the way we interact with digital systems.

TAUGHT LECTURES, SEMINARS, AND PROJECTS

Seminar on Research Paper Writing, BTK – University of Art and Design	2016
Lecture & project on Virtual Reality in the Exhibition Domain, BTK – University of Art and Design	2016
Project on Media Spaces, BTK – University of Art and Design	2015-16
Lecture & project on Creative Coding 2, BTK – University of Art and Design	2015-16
Lecture & project on Game Programming: Conception, BTK – University of Art and Design	2015-16
Lecture on Empirical Methods in Human-Computer Interaction, German University Cairo	2015
Project on Interacting with Large Displays, University of Stuttgart	2015
Project on Mobile Gaming, with Niels Henze, University of Stuttgart	2015
Lecture on Media Informatics, with Albrecht Schmidt, WS University of Stuttgart	2014-15
Seminar on Multimodal Interaction for Ubiquitous Systems, University of Stuttgart	2014-15
Lecture on Multimodal Interaction for Ubiquitous Computers, with Niels Henze, University of Stuttgart	2014-15
Lecture on Human Computer Interaction, with Albrecht Schmidt, Niels Henze, University of Stuttgart	2014-15
Seminar on Human-Robot Interaction, with Albrecht Schmidt, University of Stuttgart	2014
Usability Engineering Project on Evaluation of back-of-tablet touch interactions for 3D camera control, Technical University (TU) Berlin	2013

Lecture on Mobile & Physical Interaction, with Jörg Müller, Technical University (TU) Berlin	2012-13
Usability Engineering Project on Exploring touch-based gestures for back-of-tablet interaction, Technical University (TU) Berlin	2012-13
Usability Engineering Project on A user study on gesture ergonomics, Technical University (TU) Berlin	2012
Lecture with integrated project on Designing Multimedia Systems, University of Applied Sciences (HTW) Berlin	2009-10

SUPERVISED THESIS

Obstacle Interaction for walking interventions using floor projections, Salma Amr, Bachelor thesis, 2015

Walking through interactive architecture using VR, Rami Khalil, Bachelor thesis, 2015

An augmented drilling machine for smart whole positioning, Mayar ElMohr, Bachelor thesis, 2015

Target selection on hand-held tablets, Carlos Alberto Franco Salazar, Master thesis, 2015

Proxemic Interaction in Exhibition Light Guidance, Essam Abdelhady, Master thesis, 2015

Face detection for lifelogging video indexing, Mathias, Landwehr, Bachelor thesis, 2015

Enriching passive touch sensation on flat surfaces using visual feedback, Timm Bäder, Bachelor thesis, 2014

Simulating Material Properties using Intersensory Feedback, Carlos Barrera Méndez, Master thesis, 2014

Exploration of the Design Space for Electrostatic Tactile Stimulation, Tu Duy Diep, Master thesis, 2014

Stable motion-based digit-gesture recognition for hyper-mobile and grasp-based scenarios, Stefan Meyer, Master thesis, 2014

Seamless connections of a finger-mounted interface and generic hand-held devices, Jonas Willaredt, Master thesis, 2013

Implementing biomechanic Feasibility Predictors into a Hand Model, Yanto Budo, Bachelor thesis, 2013

Noise Resistant Tap Recognition on Mobile Devices using the Built-in Microphone, Felix Widmaier, Bachelor thesis, 2013

Comparison of direct and indirect touch for pointing on the front and the back of tablets, Markus Schneider, Bachelor thesis, 2013

Developing software to detect and analyze sensor-based hand motion data for the purpose of research on gestural interaction, Christopher-Eyk Hrabia, Master thesis, 2012

GRANTS AND FUNDED PROJECTS

Katrin Wolf was involved in acquiring funding and working in a number of national and international scientific projects directed by Professor Albrecht Schmidt at the University of Stuttgart.

FUNDING AKQUISITION

Katrin Wolf recently submitted a research proposal at the German Research Foundation (DFG) to get three years of funding for a PhD student, travel expenses, and equipment. The proposal is currently in the review process.	€226.450
Helping Albrecht Schmidt with proposal writing for SFB TRR 161, Project on Physiologically Based Interaction and Adaptive Visualization.	€240.000
Helping Albrecht Schmidt with proposal writing for FET Open Horizon 2020 proposal entitled CIMPLEX – Bringing Citizens, Models and Data together in Participatory, Interactive SociaL EXploratories	€577.625
Stipend of the Integrated Graduate Program Human-Centric Communication	€60.000
Doctoral stipend of the Technical University Berlin	€6.000
DAAD RISE project for a US Bachelor intern for 3 months	€5.000

RESEARCH PROJECTS

DFG Cluster of Excellence „Simulation Technologies" (SimTech)	2013-17
meSch - Material EncounterS with digital Cultural Heritage funded by the European Community's Seventh Framework Programme 'ICT for access to cultural resources'	2013-17
RECALL - Enhanced Human Memory EU funded Fet-Open project	2013-16

PUBLICATIONS

2016

Patrick Bader, Niels Henze, Nora Broy, and Katrin Wolf: The Effect of Focus Cues on Separation of Information Layers. In Proceedings of the ACM annual conference on Human Factors in Computing Systems (CHI 2016)

Huy Viet Le, Svan Mayer, Katrin Wolf, and Niels Henze: Finger Placement and Hand Grasp during Smartphone Interaction. In Extended Abstracts of the ACM annual conference on Human Factors in Computing Systems (CHI EA 2016)

Alan Poole, Katrin Wolf, Robb Mitchell, and Rahimullah Sarban : Bodily Sketching With Sensable Stretchables. In Proceedings of the International Conference on Tangible, Embedded and Embodied Interaction (TEI 2016)

Katrin Wolf: Microgestures – Enabling gesture input with busy hands. In Saskia Bakker, Doris Hausen, Ted Selker (Edt.) Peripheral Interaction. Challenges and Opportunities for HCI in the Periphery of Attention (2016), ISBN: 978-3-319-29521-3

2015

Katrin Wolf, Yomna Abdelrahmen, David Schmid, Tilman Dingler, and Albrecht Schmidt: Effects of Camera Position and Media Type on Lifelogging Images. In Proceedings of The 14th International Conference on Mobile and Ubiquitous Multimedia (MUM) 2015. BEST PAPER AWARD

Valentin Schwindt, Katrin Wolf, Niels Henze, and Oliver Korn: Determining the Characteristics of Preferred Virtual Faces Using an Avatar Generator. In Proceedings of The ACM SIGCHI Annual Symposium on Computer-Human Interaction in Play (CHI PLAY'15).

Patrick Baader, Normal Phol, Valentin Schwindt, Niels Henze, Katrin Wolf, Stefan Schneegass, and Albrecht Schmidt: Remote Drawing on Vertical Surfaces with a Self-Actuated, Demo at Mensch und Computer (MUC) 2015.

Patrick Baader, Valentin Schwindt, Normal Phol, Niels Henze, Katrin Wolf, Stefan Schneegass, and Albrecht Schmidt: Self-Actuated Displays for Vertical Surfaces. In Proceedings of INTERACT 2015.

Yomna Abdelrahman, Thomas Kubitza, Katrin Wolf, Normal Pohl, and Albrecht Schmidt: Tick that Box: Interactive Paper Documents. In Proceedings of INTERACT 2015.

Katrin Wolf, Markus Funk, Pascal Knierim, Markus Loechtefeld, and Sebastian Boring: Interactive Personal Displays through Mobile Projection, Workshop at MobileHCI 2015.

Katrin Wolf, Essam Abdelhady, Yomna Abdelrahman, Thomas Kubitza, and Albrecht Schmidt: meSch – Tools for Interactive Exhibitions. In Proceedings of Electronic Media and Visual Arts 2015.

Katrin Wolf, Stefan Schneegass, Niels Henze, Dominik Weber, Valentin Schwind, Pascal Knierim, Sven Mayer, Tilman Dingler, Yomna Abdelrahman, Thomas Kubitza, Markus Funk, Anja Mebus, Albrecht Schmidt: TUIs in the Large: Using Paper Tangibles with Mobile Devices. In CHI Extended Abtracts (CHI EA 2015).

Lars Lischke, Sven Mayer, Katrin Wolf, Niels Henze, Albrecht Schmidt, Svenja Leifert, Harald Reiterer: Using Space: Effect of Display Size on Users' Search Performance. In CHI Extended Abtracts (CHI EA 2015).

Katrin Wolf and Timm Bäder: Illusion of Surface Changes induced by Tactile and Visual Touch Feedback. In CHI Extended Abtracts (CHI EA 2015).

Lars Lischke, Sven Mayer, Katrin Wolf, Alireza Sahami Shirazi, and Niels Henze: Subjective and Objective Effects of Tablet's Pixel Density. In Proceedings of the ACM annual conference on Human Factors in Computing Systems (CHI 2015).

Sven Mayer, Katrin Wolf, Stefan Schneegass, and Niels Henze: Modeling Distant Pointing for Compensating Systematic Displacements. In Proceedings of the ACM annual conference on Human Factors in Computing Systems (CHI 2015).

Katrin Wolf, Markus Schneider, John Mercouris, and Christopher-Eyk Hrabia: Biomechanics of Front- and Back-of-Tablet Pointing with Grasping Hands. International Journal of Mobile Human Computer Interaction (IJMHCI), Volume 7, Issue 2, April – June 2015, Published: Quarterly in Print and Electronically, ISSN: 1942-390X, EISSN: 1942-3918, Published by IGI Global Publishing, Hershey, USA.

Katrin Wolf and Jonas Willaredt: PickRing: Seamless Interaction through Pick-Up Detection. In Proceedings of the Augmented Human International Conference (AH 2015).

Katrin Wolf: Grasp Interaction with Tablets. Springer, 2015. ISBN: 978-3-319-13980-7 (Print) 978-3-319-13981-4 (Online).

2014

Patrick Bader, Stefan Schneegass, Niels Henze, Valentin Schwind, and Katrin Wolf: A Mobile See-Through 3D Display with Front- and Back-Touch. Proceedings of NordiCHI Extended Abstracts, 2014.

Valentin Schwind, Stefan Schneegass, Niels Henze, Patrick Bader, and Katrin Wolf: Towards Transparent Handheld See-Through Devices. Proceedings of the NordiCHI Workshop on Interactions and Applications for See-Through Technologies, 2014.

Katrin Wolf and Lars Lischke: Urban Proxemics for Public Guidance. Proceedings of the NordiCHI Workshop on Ubicomp beyond Devices: People, Objects, Space and Meaning, 2014.

Katrin Wolf, Robert Schleicher, and Michael Rohs: Ergonomic Characteristics of Gestures for Front- and Back-of-Tablets Interaction with Grasping Hands. In Proceedings of the International Conference on Human Computer Interaction with Mobile Devices and Services (MobileHCI 2014).

Katrin Wolf and Niels Henze: Comparing Pointing Techniques for Grasping Hands on Tablets. In Proceedings of the International Conference on Human Computer Interaction with Mobile Devices and Services (MobileHCI 2014).

Katrin Wolf, Albrecht Schmidt, Agon Bexheti, and Marc Langheinrich: Lifelogging: You're Wearing a Camera?. IEEE Pervasive Computing Magazine, July-Sept. 2014.

Katrin Wolf, Robert Schleicher, and Michael Rohs: Touch Accessibility on the Front and the Back of held Tablet Devices. In Proceedings of EuroHaptics 2014.

Peter Bennett and Katrin Wolf: MagneTexture: A Non-Visual Tangible User Interface. Workshop paper at the ACM annual conference extended abstracts on Human Factors in Computing Systems Extended Abstracts (CHI 2014).

2013

Katrin Wolf and Pete Bennett: Haptic Cues: Texture as a Guide for Non-Visual Tangible Interaction. In CHI Extended Abstracts on Human Factors in Computing Systems (CHI 2013), 6 pages.

Katrin Wolf, Robert Schleicher, Sven Kratz and Michael Rohs: Tickle: A Surface-independent Interaction Technique for Grasp Interfaces. In Proceedings of the International Conference on Tangible, Embedded and Embodied Interaction (TEI 2013), 185-192.

Katrin Wolf: Ubiquitous Grasp Interfaces. In Proceedings of the International Conference on Tangible, Embedded and Embodied Interaction (TEI 2013), 377-378.

Katrin Wolf and Pete Bennett: Feelable User Interfaces: An Exploration of Non-Visual Tangible User Interfaces. In Online-Proceedings of the International Conference on Tangible, Embedded and Embodied Interaction (TEI 2013), 6 pages.

Christopher-Eyek Hrabia, Katrin Wolf and Mathias Wilhelm: Whole Hand Modeling using 8 Wearable Sensors: Biomechanics for Hand Pose Prediction. In Proceedings of the Augmented Human International Conference (AH 2013), 21-28.

2012

Katrin Wolf, Marilyn McGee-Lennon and Stephen Brewster: A study of on-device gestures. In Proceedings of the international conference on Human-computer interaction with mobile devices and services companion (MobileHCI 2012), 11-16.

Katrin Wolf, Christian Müller-Tomfelde, Kelvin Cheng and Ina Wechsung: Does proprioception guide back-of-device pointing as well as vision? In Proceedings of the ACM annual conference extended abstracts on Human Factors in Computing Systems Extended Abstracts (CHI 2012), 1739-1744.

Katrin Wolf: When hand and device melt into a unit: microgestures on grasped objects. In CHI Extended Abstracts on Human Factors in Computing Systems (CHI 2012), 959-962.

Katrin Wolf: Design space for finger gestures with hand-held tablets. In Proceedings of ACM international conference on Multimodal interaction (ICMI 2012), 325-328.

Katrin Wolf, Christian Müller-Tomfelde, Kelvin Chen, Ina Wechsung: PinchPad: performance of touch-based gestures while grasping devices. In Proceedings of the International Conference on Tangible, Embedded and Embodied Interaction (TEI 2012), 103-110.

Katrin Wolf: What I grasp is what I control: interacting through grasp releases. In Proceedings of the International Conference on Tangible, Embedded and Embodied Interaction (TEI 2012), 389-390.

2011

Katrin Wolf, Anja Naumann, Michael Rohs, and Jörg Müller: Taxonomy of microinteractions: defining microgestures based on ergonomic and scenario-dependent requirements. In Proceedings of IFIP TC international conference on Human-computer interaction – Volume Part I (INTERACT 2011), 559-575.

Katrin Wolf: Microinteractions to augment manual tasks. In Proceedings of IFIP TC international conference on Human-computer interaction – Volume Part I (INTERACT 2011), 414-417.

Sven Kratz, Michael Rohs, Katrin Wolf, Jörg Müller, Mathias Wilhelm, Carolina Johansson, Jakob Tholander, Jarmo Laaksolahti: Body, movement, gesture & tactility in interaction with mobile devices. In Proceedings of the International Conference on Human Computer Interaction with Mobile Devices and Services (MobileHCI 2011), 757-759.

Katrin Wolf: Microinteractions for supporting grasp tasks through usage of spare attentional and motor resources. In Proceedings of the Annual European Conference on Cognitive Ergonomics (ECCE 2011), 221-224.

Katrin Wolf: Microinteractions beside ongoing manual tasks. In Proceedings of the international conference on Tangible, embedded, and embodied interaction (TEI 2011), 447-448.

Katrin Wolf, Christina Dicke, Raphael Grasset: Touching the void: gestures for auditory interfaces. In Proceedings of the international conference on Tangible, embedded, and embodied interaction (TEI 2011), 305-308. .

2010

Christina Dicke, Katrin Wolf, Yaroslav Tal: Foogue: eyes-free interaction for smartphones. In Proceedings of the international conference on Human computer interaction with mobile devices and services (MobileHCI 2010), 455-458.