

Markus Funk

HUMAN-COMPUTER INTERACTION RESEARCHER · USER EXPERIENCE DEVELOPER

Hochschulstraße 10, 64289 Darmstadt, Germany

☎ (+49) 1578 4561337 | ✉ makufunk@hotmail.com | 🏠 www.makufunk.de | 📷 makufunk | 📺 markus-funk-65500056 | 🐦 @makufunk

“AR, VR, Drones”

Summary

Human-Computer Interaction researcher with a focus on Augmented Reality, Virtual Reality, and drones. Strong background in designing complex distributed software systems using C#, Java, Arduino, and NodeMCU. Interested in using Augmented and Virtual Reality as an interface for interacting with the physical world and making interacting with technology an easy and joyful experience for every user group.

Work Experience

TU Darmstadt

POSTDOCTORAL RESEARCHER (AREA HEAD - HCI)

- Leading the HCI research group of the Telecooperation Group
- Using Augmented Reality and Virtual Reality to improve human skills and cognitive capabilities

Darmstadt, Germany

Sept. 2017 - PRESENT

Siemens Corporation

VISITING POSTDOCTORAL RESEARCHER

- Designing and evaluating Augmented and Mixed Reality interfaces for industrial scenarios.
- Creating personal and shared Augmented Reality experiences using head-mounted displays (e.g. Microsoft HoloLens)

Berkeley, CA, USA

Jan. 2017 - Aug. 2017

University of Stuttgart

PHD STUDENT AND RESEARCH ASSOCIATE

- Technical and research lead of the research project motionEAP (funded by the German Ministry for Economic Affairs and Energy - BMWI), which equipped assembly workplaces in factories with assistive technology using projected Augmented Reality.
- Conducted studies with different user groups (students, industry workers, persons with cognitive and motoric disabilities).
- Combining Augmented Reality, Virtual Reality, and Human-Drone interaction to improve each of the areas and creating unique user experiences.

Stuttgart, DE

Feb. 2013 - Dec. 2016

MIT Media Lab

VISITING RESEARCHER

- Focused on using Virtual Reality applications to improve and create virtual learning scenarios for learners and trainers.
- Using Virtual Reality to overcome physical distance and having remote meetings while being in the same virtual space.

Cambridge, MA, USA

April 2016 - June 2016

Yahoo!-Labs

RESEARCH INTERN

- Wrote diploma thesis under the supervision of Lars Erik Holmquist about developing a search engine for the physical world.

Sunnyvale, CA, USA

June. 2012 - Sept. 2012

Intergraph PP&M Germany

SOFTWARE DEVELOPER (C++)

- Responsible for developing an automatic report generation system using large scale databases.

Süßen, DE

Oct. 2009 - April 2010

Education

University of Stuttgart

PH.D IN HUMAN-COMPUTER INTERACTION

- Thesis “Augmented Reality at the Workplace: A context-aware Assistive System using In-Situ Projection” was graded with magna cum laude.

Stuttgart, DE

Feb. 2013 - Nov. 2016

University of Stuttgart

DIPLOMA IN COMPUTER SCIENCE WITH MAJOR SOFTWARE ENGINEERING

- Diploma thesis “Searching the real world using stationary and mobile object detection” was conducted abroad with Yahoo!-Labs.

Stuttgart, DE

Oct. 2007 - Dec. 2012

Program Committees

2017	Workshop and Tutorial Co-Chair , International Conference on the Internet of Things (IoT)	<i>Austria</i>
2016	Poster and Demo Chair , International Conference on the Internet of Things (IoT)	<i>Germany</i>
2018	Program Committee Member , International Symposium on Mixed and Augmented Reality (ISMAR)	<i>DE</i>
2018	Program Committee Member , International Symposium on Pervasive Displays (PerDis)	<i>DE</i>
2018	Program Committee Member , PErvasive Technologies Related to Assistive Environments (PETRA)	<i>GR</i>
2015-2017	Program Committee Member , International Conference on the Internet of Things (IoT)	<i>KOR/DE/AT</i>
2017	Program Committee Member , ACM Multimedia - Ubiquitous Multimedia track (ACM MM)	<i>USA</i>
2017	Program Committee Member , International Conference on Mobile and Ubiquitous Multimedia (MUM)	<i>DE</i>
2017	Program Committee Member , Int. Conf. on Advances in Mobile Computing and Multimedia (MoMM)	<i>AT</i>
2017	Program Committee Member , i-KNOW: Human-Computer Interaction Perspectives on Industry 4.0	<i>AT</i>
2016	Program Committee Member , Nordic Conference on Human-Computer Interaction (NordiCHI)	<i>Sweden</i>
2016-2017	Program Committee Member , Mensch und Computer (MuC)	<i>Germany</i>
2018	Workshop Organizer “Workshop on Interacting with Smart Objects” , The ACM Conference on Human Factors in Computing Systems (CHI)	<i>CA</i>
2017	Workshop Organizer “Handling the Internet of Things: Human-Computer Interaction Perspectives on IoT (HCIIoT)” , International Conference on the Internet of Things (IoT)	<i>AT</i>
2017	Workshop Organizer “Designing Assistive Environments for Manufacturing (DAEM)” , International Conference on Pervasive Technologies Related to Assistive Environments (PETRA)	<i>Greece</i>
2015	Workshop Organizer “Interactive Personal Displays through Mobile Projection” , International Conference on Human-Computer Interaction with Mobile Devices and Services (MobileHCI)	<i>Denmark</i>

Reviewing Activity

CONFERENCES

CHI	Conference on Human Factors in Computing Systems	<i>2014-2018</i>
AH	Augmented Human International Conference	<i>2014</i>
NordiCHI	Nordic Conference on Human-Computer Interaction	<i>2014,2016</i>
IoT	International Conference on the Internet of Things	<i>2015-2017</i>
MuC	Mensch und Computer	<i>2015-2017</i>
MUM	International Conference on Mobile and Ubiquitous Multimedia	<i>2015-2017</i>
PerDis	International Symposium on Pervasive Displays	<i>2015</i>
TEI	International Conference on Tangible, Embedded and Embodied Interaction	<i>2016-2017</i>
UbiComp	International Joint Conference on Pervasive and Ubiquitous Computing	<i>2016</i>
ISWC	International Symposium on Wearable Computers	<i>2016</i>
mobileHCI	International Conference on Human-Computer Interaction with Mobile Devices and Services	<i>2016-2017</i>
Mindtrek	Academic Mindtrek Conference	<i>2016</i>
ACMMM	ACM Annual Conference on Multimedia	<i>2017</i>
VRST	ACM Symposium on Virtual Reality Software and Technology	<i>2017</i>
HAPTICS	IEEE Haptics Symposium	<i>2018</i>
IEEE VR	IEEE Conference on Virtual Reality and 3D User Interfaces	<i>2018</i>

JOURNALS

IMWUT	Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies	<i>2017</i>
IEEECS	IEEE Pervasive Computing	<i>2016-2017</i>
JPUC	Personal and Ubiquitous Computing	<i>2017</i>
MTI	Multimodal Technologies and Interaction	<i>2017</i>
IJHCS	International Journal of Human-Computer Studies	<i>2018</i>

Teaching

2016	Lecture , Introduction to Human-Computer Interaction with Prof. Dr. Albrecht Schmidt and Dr. Tonja Machulla	<i>Stuttgart, DE</i>
2015	Lecture , Empirical Methods for Media Informatics with Dr. Lewis Chuang	<i>Stuttgart, DE</i>
2014	Project , WearableOS with Prof. Dr. Stefan Schneegass	<i>Stuttgart, DE</i>
2013	Project , Keepsake with Prof. Dr. Niels Henze and Prof. Dr. Florian Alt	<i>Stuttgart, DE</i>
2013	Lecture , Introduction to Human-Computer Interaction with Prof. Dr. Albrecht Schmidt and Prof. Dr. Niels Henze	<i>Stuttgart, DE</i>

Invited Talks

2017	Johannes Kepler University (JKU) Linz , Guest Lecture on Augmented and Virtual Reality	<i>Linz, Austria</i>
2017	University of Duisburg-Essen , Guest Lecture on Augmented and Virtual Reality	<i>Essen, Germany</i>
2016	German University in Cairo , Workshop on Affective Computing and Augmented Reality	<i>Cairo, Egypt</i>
2016	TU Darmstadt , Telecooperation Lab	<i>Darmstadt, DE</i>
2016	University of Stuttgart , HCI Summerschool - Lecture on Augmented Reality	<i>Stuttgart, DE</i>
2016	VDI/VDE , Service-orientierte Architekturen für Industrie 4.0	<i>Berlin, DE</i>
2015	Virtual Dimension Center , Serious Gaming für Betriebliche Unfall und Gefahrenabwehr	<i>St. Georgen, DE</i>
2015	VDI/VDE , Softwarearchitekturen für die Industrie 4.0	<i>Berlin, DE</i>
2014	Web of Things Group , Siemens Corporate Technology	<i>Berkeley, CA, USA</i>
2013	InfoLab21 , Lancaster University's Centre of excellence for ICT Lancaster	<i>Lancaster, UK</i>