

# Markus Funk

HUMAN-COMPUTER INTERACTION RESEARCHER · USER EXPERIENCE DEVELOPER

1988 Martin Luther King Jr. Way #515, Berkeley, CA 94704, USA

☎ (+1) 510-326-1380 | ✉ 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

---

### Siemens Corporation

POSTDOCTORAL RESEARCH INTERN

Berkeley, CA, USA

Jan. 2017 - PRESENT

- 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)

### University of Stuttgart

PHD STUDENT AND RESEARCH ASSOCIATE

Stuttgart, DE

Feb. 2013 - Dec. 2016

- 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.

### MIT Media Lab

VISITING RESEARCHER

Cambridge, MA, USA

April 2016 - June 2016

- 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.

### Yahoo!-Labs

RESEARCH INTERN

Sunnyvale, CA, USA

June. 2012 - Sept. 2012

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

### Intergraph PP&M Germany

SOFTWARE DEVELOPER (C++)

Süßen, DE

Oct. 2009 - April 2010

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

## Education

---

### University of Stuttgart

PH.D IN HUMAN-COMPUTER INTERACTION

Stuttgart, DE

Feb. 2013 - Nov. 2016

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

### University of Stuttgart

DIPLOMA IN COMPUTER SCIENCE WITH MAJOR SOFTWARE ENGINEERING

Stuttgart, DE

Oct. 2007 - Dec. 2012

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

## Program Committees

---

2017	<b>Workshop and Tutorial Co-Chair</b> , International Conference on the Internet of Things (IoT)	<i>Austria</i>
2016	<b>Poster and Demo Chair</b> , International Conference on the Internet of Things (IoT)	<i>Germany</i>
2015-17	<b>Program Committee Member</b> , International Conference on the Internet of Things (IoT)	<i>KOR/DE/AT</i>
2017	<b>Program Committee Member</b> , ACM Multimedia - Ubiquitous Multimedia track (ACM MM)	<i>USA</i>
2016	<b>Program Committee Member</b> , Nordic Conference on Human-Computer Interaction (NordiCHI)	<i>Sweden</i>
2016-2017	<b>Program Committee Member</b> , Mensch und Computer (MuC)	<i>Germany</i>
2017	<b>Workshop Organizer “Designing Assistive Environments for Manufacturing (DAEM)”</b> , International Conference on Pervasive Technologies Related to Assistive Environments (PETRA)	<i>Greece</i>
2015	<b>Workshop Organizer “Interactive Personal Displays through Mobile Projection”</b> , International Conference on Human-Computer Interaction with Mobile Devices and Services (MobileHCI)	<i>Denmark</i>

## Reviewing Activity

---

### CONFERENCES

CHI	<b>Conference on Human Factors in Computing Systems</b>	<i>2014-2017</i>
AH	<b>Augmented Human International Conference</b>	<i>2014</i>
NordiCHI	<b>Nordic Conference on Human-Computer Interaction</b>	<i>2014,2016</i>
IoT	<b>International Conference on the Internet of Things</b>	<i>2015-2017</i>
MuC	<b>Mensch und Computer</b>	<i>2015-2016</i>
MUM	<b>International Conference on Mobile and Ubiquitous Multimedia</b>	<i>2015-2016</i>
PerDis	<b>International Symposium on Pervasive Displays</b>	<i>2015</i>
TEI	<b>International Conference on Tangible, Embedded and Embodied Interaction</b>	<i>2016</i>
UbiComp	<b>International Joint Conference on Pervasive and Ubiquitous Computing</b>	<i>2016</i>
ISWC	<b>International Symposium on Wearable Computers</b>	<i>2016</i>
mobileHCI	<b>International Conference on Human-Computer Interaction with Mobile Devices and Services</b>	<i>2016-2017</i>
Mindtrek	<b>Academic Mindtrek Conference</b>	<i>2016</i>

### JOURNALS

IMWUT	<b>Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies</b>	<i>2017</i>
IEEECS	<b>IEEE Pervasive Computing</b>	<i>2017</i>

## Invited Talks

---

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

## Teaching

---

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