

# Florian Daiber

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## Curriculum Vitae

### Contact

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Website <http://www.dfki.de/~fdaiber>

### Education

#### PhD

Mai 2015 **PhD in Computer Science (Dr.-Ing. Informatik)**, *Saarbrücken Graduate School of Computer Science, Universität des Saarlandes, Saarbrücken.*

Titel *Touching the 3rd Dimension – Interaction with Stereoscopic Data on and above Interactive Surfaces*

Topic The doctoral thesis explores multi-touch and gestural 3D interaction on and above interactive surfaces and investigates the design space of interaction with stereoscopic data. The work focuses on technological and perceptual questions of how users interact with stereoscopically displayed 3D content on 2D interactive surfaces.

Advisor Prof. Dr. Antonio Krüger

Grade 1.0 (magna cum laude)

#### Diploma

Juli 2008 **Diploma in Geoinformatik (Diplom Geoinformatik)**, *Westfälische Wilhelms-Universität Münster, Münster.*

Titel *Prototypische Entwicklung einer Gestenbibliothek für Multi-touch Interaktion auf Virtuellen Globen*

Topic The thesis examined interaction with virtual globes and investigated gestural multitouch interaction with geo-spatial data on large-scale multi-touch walls

Advisor Prof. Dr. Antonio Krüger

Grade 1.3

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## Research and Teaching Interests

- Human-Computer Interaction and 3D User Interfaces
- Multi-touch and Gestural 3D Interaction
- Stereoscopic Interactive Surfaces
- Ubiquitous Sports Technologies
- Mixed and Augmented Reality
- Location-based Services
- Gaze-based Interaction
- Mobile Interaction

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## Research Experience

- September 2018 – **Senior Researcher (Post-Doc)**.  
2018 – Deutsches Forschungszentrum für Künstliche Intelligenz (DFKI)  
present
- August 2015 – **Researcher (Post-Doc)**.  
August 2018 Deutsches Forschungszentrum für Künstliche Intelligenz (DFKI)
- Januar 2015 – **Researcher**.  
Juli 2015 Deutsches Forschungszentrum für Künstliche Intelligenz (DFKI)
- September 2014 – **Marie Curie Research Fellow**.  
2014 – School of Computing and Communications, Lancaster University, UK  
Dezember 2014
- Juli 2013 – **Researcher**.  
August 2014 German Research Center for Artificial Intelligence (DFKI)
- Januar 2010 – **Research Associate**.  
Juli 2013 Saarland University
- August 2008 – **Research Associate**.  
Dezember 2010 Institute for Geoinformatics, WWU Münster
- Juli 2007 – **Student Assistant**.  
Juli 2008 Institute for Geoinformatics, WWU Münster
- September 2001 – **Student Assistant**.  
2001 – SEA Europe, Münster
- Februar 2003

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## Research Projects

- Juli 2018 – **Entwicklung einer Endbenutzer-Plattform für Assistenzdienste mit interoperablen IoT-Geräten und tragbarer Sensorik (IoTAssist)**,  
present *funded by the BMBF.*

German Research Center for Artificial Intelligence (DFKI)

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- September 2017 – **Transfer of Control between Autonomous Agents (TRACTAT)**,  
 funded by the BMBF.  
 present German Research Center for Artificial Intelligence (DFKI)
- Januar 2017 – **EIT Digital Smart Retail**, funded by EIT DIGITAL.  
 September 2017 German Research Center for Artificial Intelligence (DFKI)
- Januar 2016 – **Affective lighting for novel grocery retail experiences (ALIGRE)**,  
 Dezember 2016 funded by EIT DIGITAL.  
 German Research Center for Artificial Intelligence (DFKI)
- September 2014 – **Intelligent Context-Aware Systems for Healthcare, Wellness, and  
 Assisted Living (iCareNet)**, funded by the EU.  
 Dezember 2014 School of Computing and Communications, Lancaster, UK
- August 2013 – **Festo-Projekt**, *Industry Project*.  
 Februar 2014 German Research Center for Artificial Intelligence (DFKI)
- Februar 2013 **T3D – Touching the 3rd Dimension**, funded by the DFG.  
 – Januar 2016 German Research Center for Artificial Intelligence (DFKI)
- Juli 2012 – **Multi-modal Interaction with Distant Objects using Eye Gaze and  
 Juli 2013 Multi-touch Input**, funded by the NUANCE FOUNDATION.  
 German Research Center for Artificial Intelligence (DFKI)
- Januar 2010 – **iMUTS – Interscopic Multi-touch Surfaces**, funded by the DFG.  
 Dezember 2012 Saarland University
- Juli 2007 – **SoKNOS – Service-orientierte Architekturen zur Unterstützung  
 Dezember 2009 von Netzwerken im Rahmen Oeffentlicher Sicherheit**, funded by the  
 BMBF.  
 Institute for Geoinformatics, WWU Münster

## Teaching

- Winter 2018/19 **Sensing Virtual Reality: Practical Seminar on Dynamic Passive Haptics**, *Seminar*.  
 Saarland University
- Sommer 2018 **AI for the Transfer of Control from Autonomous Systems to Humans**,  
*Seminar*.  
 Saarland University
- Sommer 2018 **Human-Centered Design for Virtual Reality**, *Proseminar*.  
 Saarland University
- Winter 2017/18 **Design and Evaluation of Ubiquitous Technology in Sports**, *Seminar*.  
 Saarland University

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- Sommer 2017 **Introduction to 3D User Interfaces - User-Centered Design for Virtual Reality**, *Proseminar*.  
Saarland University
- Sommer 2016 **Ubiquitous Sports Technologies**, *Seminar*.  
Saarland University
- Winter 2015/16 **Introduction to 3D User Interfaces**, *Proseminar*.  
Saarland University
- Sommer 2013 **Software Development in HCI**, *Seminar*.  
Saarland University
- Sommer 2013 **3D Interfaces and 2D Interfaces for 3D Authoring and Navigation**,  
*Seminar*.  
Saarland University
- Winter 2012/13 **Grundlagen der Medieninformatik**, *Vorlesung (Lehrassistenz)*.  
Saarland University
- Winter 2011/12 **Touching the 3rd Dimension: Touch and Gestural Interactions on and above the Display**, *Seminar*.  
Saarland University
- Winter 2011/12 **Game Development for Tabletops**, *Seminar*.  
Saarland University
- Winter 2010/11 **Libavg II**, *Seminar*.  
Universität des Saarlandes
- Sommer 2010 **Multi-touch - Emerging Trends in Technology and Interaction**,  
*Seminar*.  
Saarland University
- Winter 2009/10 **Libavg I**, *Seminar*.  
Saarland University
- Sommer 2009 **Geosoftware I**, *Seminar*.  
WWU Münster
- Winter 2008/09 **Geosoftware II**, *Seminar*.  
WWU Münster

## Academic Community Involvement

### Committees

- 2019 **ETRA**, *ACM Symposium on Eye Tracking Research & Applications*, Program Committee Member.
- 2019 **ET4S**, *Symposium on Eye Tracking for Spatial Research co-located with ETRA*, Program Committee Member.
- 2019 **VR**, *IEEE Conference on Virtual Reality and 3D User Interfaces*, Program Committee Member Journal Track.

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- 2019 **IUI**, *ACM International Conference on Intelligent User Interfaces*, Program Committee Member.
- 2018 **SUI**, *ACM Symposium on Spatial User Interaction*, Social Media Chair.
- 2018 **MM**, *ACM Multimedia*, Program Committee Member.
- 2018 **VR**, *IEEE Conference on Virtual Reality and 3D User Interfaces*, Program Committee Member Conference Track.
- 2017 – 2018 **CHI PLAY**, *ACM SIGCHI Annual Symposium on Computer-Human Interaction in Play*, Program Committee Member.
- 2017 – 2018 **MUM**, *International Conference on Mobile and Ubiquitous Multimedia*, Program Committee Member.
- 2017 **SUI**, *ACM Symposium on Spatial User Interaction*, Posters Chair.
- 2016 **UbiComp**, *ACM International Joint Conference on Pervasive and Ubiquitous Computing*, Publication Chair.
- 2015 – 2017 **IUI**, *ACM International Conference on Intelligent User Interfaces*, Program Committee Member.
- 2015 **ITS**, *ACM International Conference on Interactive Tabletops and Surfaces*, Program Committee Member.
- 2015 – 2016 **PETMEI**, *International Workshop on Pervasive Eye Tracking and Mobile Eye-Based Interaction*, Program Committee Member.
- 2014 **UIST**, *ACM Symposium on User Interface Software and Technology*, Web and Social Media Chair.
- 2014 **SUI**, *ACM Symposium on Spatial User Interaction*, Social Media Chair.
- 2014 – 2018 **ETAS**, *Workshop on Eye Tracking for Spatial Research*, Program Committee Member.
- 2012 – 2015 **IT-Rettung**, *Workshop on IT in Emergency Management & Response*, Program Committee Member.
- 2013 **GeoHCI**, *Workshop on Geographic Human-Computer Interaction*, Program Committee Member.
- 2012 **3DCHI**, *Workshop on The 3rd Dimension of CHI: Touching and Designing 3D User Interfaces*, Program Committee Member.
- 2012 **KI**, *German Conference on Artificial Intelligence*, Web and Student Volunteer Chair.
- 2010 **ITS**, *ACM International Conference on Interactive Tabletops and Surfaces*, Student Volunteer Chair.

### Journal Reviewing

- 2017 – 2018 **IJHCS**, *International Journal of Human-Computer Studies*, Research papers.
- 2017 – 2018 **IMWUT**, *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT)*, Research papers.

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- 2017 **TII**, *IEEE Transactions on Industrial Informatics*, Research papers.
- 2016-2017 **Tiis**, *ACM Transactions on Interactive Intelligent Systems*, Research papers.
- 2012-2015 **TVGC**, *IEEE Transactions on Visualization and Computer Graphics*, Research papers.
- 2012-2014 **C&G**, *ELSEVIER Computers and Graphics*, Research papers.
- 2011 **AHCI**, *Advances in Human-Computer Interaction*, Research Papers.
- Conference Reviewing**
- 2011 – 2016 **3DUI**, *IEEE Symposium on 3D User Interfaces*, Papers, Notes.
- 2011 – 2019 **CHI**, *ACM SIGCHI Conference on Human Factors in Computing Systems*, Papers, Notes, Case Studies, Works-in-Progress, Late-Breaking Work, Interactivity, Workshops/Symposia.
- 2017 – 2018 **CHI PLAY**, *ACM SIGCHI Annual Symposium on Computer-Human Interaction in Play*, Papers.
- 2012 – 2017 **DIS**, *ACM conference on Designing Interactive Systems*, Papers, Notes.
- 2011 – 2013 **EuroVis**, *Eurographics Conference on Visualization*, Papers, Notes.
- 2015 – 2017 **INTERACT**, *IFIP TC.13 International Conference on Human-Computer Interaction*, Papers, Notes.
- 2016 – 2018 **ISS**, *ACM International Conference on Interactive Surfaces and Spaces*, Papers, Notes.
- 2018 **ISWC**, *International Symposium on Wearable Computers*, Papers, Brief, Notes.
- 2010 – 2015 **ITS**, *ACM International Conference on Interactive Tabletops and Surfaces*, Papers, Notes.
- 2011 – 2019 **IUI**, *International Conference on Intelligent User Interfaces*, Papers, Notes.
- 2011 – 2014, 2018 **MobileHCI**, *International Conference on Human Computer Interaction with Mobile Devices and Services*, Papers, Notes.
- 2012 – 2018 **MUM**, *International Conference on Mobile and Ubiquitous Multimedia*, Papers, Notes.
- 2012 – 2014 **NordiCHI**, *Nordic Conference on Human-Computer Interaction*, Papers, Notes.
- 2009 – 2011 **Pervasive**, *International Conference on Pervasive Computing*, Papers, Notes.
- 2013 – 2016 **Ubicomp**, *International Joint Conference on Pervasive and Ubiquitous Computing*, Papers, Notes.
- 2011 – 2012 **Ubicomp**, *International Conference on Ubiquitous Computing*, Papers, Notes.
- 2012 – 2018 **UIST**, *ACM Conference on User Interface Software Technology*, Papers, Notes.

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- 2019 **VR**, *IEEE Conference on Virtual Reality and 3D User Interfaces*, Journal Track Papers.
- 2018 **VR**, *IEEE Conference on Virtual Reality and 3D User Interfaces*, Conference Track Papers.
- 2017 – 2018 **VRST**, *ACM Symposium on Virtual Reality Software and Technology*, Papers.

### Community Building: Ubiquitous Technologies for Sports and Outdoor Recreation

- 2018 **HCI Outdoors**, *CHI 2018 Workshop on “Understanding Human-Computer Interaction in the Outdoors”*, Organizer.
- 2017 **Sports Wearables Tutorial**, *Tutorial on Wearable Computing in Sports*, Organizer.
- 2017 **UbiMount**, *UbiComp 2017 2nd Workshop on “Ubiquitous Computing in the Mountains”*, Organizer.
- 2017 **CHI**, *CHI 2017 Special Interest Group “Interactive Computing in Outdoor Recreation”*, Organizer.
- 2016 **UbiMount**, *UbiComp 2016 Workshop on “Ubiquitous Computing in the Mountains”*, Organizer.

### Community Building: Touching the 3rd dimension (T3D)

- 2017 **SUI Panel**, *SUI 2017 Panel on “Spatial User Interaction”*, Moderator.
- 2013 **ISIS3D**, *ITS 2013 Tutorial and Workshop on “Interactive Surfaces for Interaction with Stereoscopic 3D (ISIS3D)”*, Organizer.
- 2012 **Dagstuhl**, *Dagstuhl Seminar on “Touching the 3rd Dimension”*, Coordination and Website.
- 2012 **3DCHI**, *The 3rd Dimension of CHI*, Coordination and Website.
- 2011 **T3D**, *CHI 2011 Special Interest Group “Touching the 3rd Dimension”*, Organizer.

## Awards

- 2018 Best Demo Award for “Using Whole-body Gestures for Interactive Slackline Training”, *ACM Symposium on Spatial User Interaction (SUI 2018)*
- 2018 Best Paper Award for “Error-Aware Gaze-Based Interfaces for Robust Mobile Gaze Interaction”, *10th ACM Symposium on Eye Tracking Research and Application (ETRA 2018)*
- 2017 Busy Beaver Teaching Award for “Introduction to 3D User Interfaces”, *Saarland University*

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- 2013 Best Paper Award Nominee for “Is Autostereoscopy Useful for Handheld AR?”, 12th International Conference on Mobile and Ubiquitous Multimedia (MUM 2013)

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## Memberships

- 2012 – **ACM**, *Association for Computing Machinery*, Professional Member.  
present
- 2012 – **GI**, *Gesellschaft für Informatik*, Member.  
present

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## Publications

### Journal Articles

- 2017 Mahmoud Hassan, Florian Daiber, Frederik Wiehr, Felix Kosmalla, and Antonio Krüger. Footstriker: An ems-based foot strike assistant for running. *Proc. ACM Interact. Mob. Wearable Ubiquitous Technol.*, 1(1):2:1–2:18, March 2017
- 2015 Ashley Colley, Jonna Häkkinä, Johannes Schöning, Florian Daiber, Frank Steinicke, and Antonio Krüger. Touch the 3rd dimension! understanding stereoscopic 3d touchscreen interaction. In Theodor Wyeld, Paul Calder, and Haifeng Shen, editors, *Computer-Human Interaction. Cognitive Effects of Spatial Interaction, Learning, and Ability*, volume 8433 of *Lecture Notes in Computer Science*, pages 47–67. Springer International Publishing, 2015
- 2012 Florian Daiber, Antonio Krüger, Johannes Schöning, and Jörg Müller. Context-sensitive display environments. In Antonio Krüger and Tsvi Kuflik, editors, *Ubiquitous Display Environments*, Cognitive Technologies, pages 31–51. Springer Berlin Heidelberg, 2012
- 2011 Florian Daiber, Johannes Schöning, and Antonio Krüger. Towards a framework for whole body interaction with geospatial data. In David England, editor, *Whole Body Interaction*, Human-Computer Interaction Series, pages 197–207. Springer London, 2011
- 2009 Johannes Schöning, Jonathan Hook, Nima Motamedi, Patrick Olivier, Florian Echtler, Peter Brandl, Laurence Muller, Florian Daiber, Otmar Hilliges, Markus Löchtefeld, Tim Roth, Dominik Schmidt, and Ulrich von Zadow. Building interactive multi-touch surfaces. *Journal of Graphics Tools*, 2009

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## Conference Papers

- 2018 Felix Kosmalla, Christian Murlowski, Florian Daiber, and Antonio Krüger. Slackliner - an interactive slackline training assistant. In *Proceedings of the 26th ACM International Conference on Multimedia*, MM '18, pages 154–162, New York, NY, USA, 2018. ACM
- 2018 Michael Barz, Florian Daiber, Daniel Sonntag, and Andreas Bulling. Error-aware gaze-based interfaces for robust mobile gaze interaction. In *Proceedings of the 2018 ACM Symposium on Eye Tracking Research & Applications*, ETRA '18, pages 24:1–24:10, New York, NY, USA, 2018. ACM
- 2018 Marco Speicher, Philip Christopher Hell, Florian Daiber, Adalberto Simone, and Antonio Krüger. A virtual reality shopping experience using the apartment metaphor. In *Proceedings of the International Conference on Advanced Visual Interfaces. International Working Conference on Advanced Visual Interfaces (AVI-2018), May 29 - June 1, Castiglione della Pescaia, Italy*. ACM, 6 2018
- 2017 Felix Kosmalla, Florian Daiber, Frederik Wiehr, and Antonio Krüger. Climbis: Investigating in-situ visualizations for understanding climbing movements by demonstration. In *Proceedings of the 2017 ACM International Conference on Interactive Surfaces and Spaces*, ISS '17, pages 270–279, New York, NY, USA, 2017. ACM
- 2016 Michael Barz, Florian Daiber, and Andreas Bulling. Prediction of gaze estimation error for error-aware gaze-based interfaces. In *Proceedings of the Ninth Biennial ACM Symposium on Eye Tracking Research & Applications*, ETRA '16, pages 275–278, New York, NY, USA, 2016. ACM
- 2016 Felix Kosmalla, Frederik Wiehr, Florian Daiber, Antonio Krüger, and Markus Löchtefeld. Climbaware: Investigating perception and acceptance of wearables in rock climbing. In *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems*, CHI '16, pages 1097–1108, New York, NY, USA, 2016. ACM
- 2016 Marco Speicher, Florian Daiber, Sven Gehring, and Antonio Krüger. Exploring 3d manipulation on large stereoscopic displays. In *Proceedings of the 5th ACM International Symposium on Pervasive Displays*, PerDis '16, pages 59–66, New York, NY, USA, 2016. ACM
- 2015 Felix Kosmalla, Florian Daiber, and Antonio Krüger. Climbsense: Automatic climbing route recognition using wrist-worn inertia measurement units. In *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems*, CHI '15, pages 2033–2042, New York, NY, USA, 2015. ACM

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- 2015 Paul Lubos, Oscar Ariza, Gerd Bruder, Florian Daiber, Frank Steinicke, and Antonio Krüger. Hoverspace. In Julio Abascal, Simone Barbosa, Mirko Fetter, Tom Gross, Philippe Palanque, and Marco Winckler, editors, *Human-Computer Interaction – INTERACT 2015*, volume 9298 of *Lecture Notes in Computer Science, LNCS*, pages 259–277. Springer International Publishing, 2015
- 2014 Florian Daiber, Marco Speicher, Sven Gehring, Markus Löchtefeld, and Antonio Krüger. Interacting with 3d content on stereoscopic displays. In *Proceedings of The International Symposium on Pervasive Displays, PerDis '14*, pages 32:32–32:37, New York, NY, USA, 2014. ACM
- 2013 Frederic Kerber, Pascal Lessel, Michael Mauderer, Florian Daiber, Antti Oulasvirta, and Antonio Krüger. Is Autostereoscopy Useful for Handheld AR? In *Proceedings of the 12th International Conference on Mobile and Ubiquitous Multimedia, MUM '13*, New York, NY, USA, 2013. ACM
- 2013 Gábor Sörös, Florian Daiber, and Tomer Weller. Cyclo - A Personal Bike Coach Through the Glass. In *Proceedings SIGGRAPH Asia Symposium on Mobile Graphics and Interactive Applications*. ACM, November 2013
- 2012 Florian Daiber, Lianchao Li, and Antonio Krüger. Designing Gestures for Mobile 3D Gaming. In *Proceedings of the 11th International Conference on Mobile and Ubiquitous Multimedia, MUM '12*, New York, NY, USA, 2012. ACM
- 2012 Florian Daiber, Sven Gehring, Markus Löchtefeld, and Antonio Krüger. Touchposing - multi-modal interaction with geospatial data. In *Proceedings of the 11th International Conference on Mobile and Ubiquitous Multimedia, MUM '12*, New York, NY, USA, 2012. ACM
- 2012 Florian Daiber, Eric Falk, and Antonio Krüger. Balloon Selection revisited - Multi-touch Selection Techniques for Stereoscopic Data. In *Proceedings of the International Conference on Advanced Visual Interfaces, AVI '12*, pages 441–444, New York, NY, USA, 2012. ACM
- 2012 Sven Gehring, Markus Löchtefeld, Florian Daiber, Matthias Böhmer, and Antonio Krüger. Using intelligent natural user interfaces to support sales conversations. In *Proceedings of the 2012 ACM international conference on Intelligent User Interfaces, IUI '12*, pages 97–100, New York, NY, USA, 2012. ACM
- 2012 Frederic Kerber, Florian Daiber, and Antonio Krüger. OpenIndoorMap – Erfassung von Innenräumen mittels Smartphone. In *Tagungsband FOSSGIS 2012*, Dessau, 2012. FOSSGIS e.V
- 2012 Dimitar Valkov and Frank Steinicke and Gerd Bruder and Klaus H. Hinrichs, and Johannes Schöning and Florian Daiber and Antonio Krüger. Touching floating objects in projection-based virtual reality environments. In *Joint Virtual Reality Conference*. Eurographics, 2010

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- 2009 Florian Daiber, Johannes Schöning, and Antonio Krüger. Whole body interaction with geospatial data. In *SG '09: Proceedings of the 10th International Symposium on Smart Graphics*, pages 81–92. Springer, 2009
- 2009 Florian Daiber, Christoph Stasch, Alexander C. Walkowski, Johannes Schöning, and Antonio Krüger. Multi-Touch- und Multi-User-Interaktion zur Verbesserung des kollaborativen Arbeitens in Katastrophenstäben. In *Proceedings of Geoinformatik*, 2009

### Workshop Papers

- 2018 Keith Cheverst, Mads Bødker, and Florian Daiber. HCI Outdoors: How Smart Wearables can Help to Promote a Better Lifestyle. In *Proceedings of the ACM CHI Workshop on Workshop on Understanding Human-Computer Interaction in the Outdoors (HCI Outdoors)*. *CHI Workshop on Workshop on Understanding Human-Computer Interaction in the Outdoors (HCI Outdoors '18)*, located at CHI 2018, April 21, Montreal, CA. HCI Outdoors, 2018
- 2018 Frederic Kerber, Florian Daiber, and Antonio Krüger. HCI Outdoors: How Smart Wearables can Help to Promote a Better Lifestyle. In *Proceedings of the ACM CHI Workshop on Workshop on Understanding Human-Computer Interaction in the Outdoors (HCI Outdoors)*. *CHI Workshop on Workshop on Understanding Human-Computer Interaction in the Outdoors (HCI Outdoors '18)*, located at CHI 2018, April 21, Montreal, CA. HCI Outdoors, 2018
- 2018 Donald Degraen, Marco Speicher, André Zenner, Florian Daiber, and Antonio Krüger. Enriching touch in mixed reality using personal fabrication. In *Proceedings of the ACM CHI Workshop on Reshaping Touch Communication: An Interdisciplinary Research Agenda*. *Workshop on Reshaping Touch Communication: An Interdisciplinary Research Agenda, April 21–26, Montreal, Canada*. Reshaping Touch Communication, 2018
- 2018 André Zenner, Felix Kosmalla, Marco Speicher, Florian Daiber, and Antonio Krüger. A projection-based interface to involve semi-immersed users in substitutional realities. In *2018 IEEE 4th Workshop on Everyday Virtual Reality (WEVR)*. *Workshop on Everyday Virtual Reality (WEVR-2018)*, 4th, March 18, Reutlingen, Germany. IEEE, 3 2018
- 2017 Florian Daiber, Felix Kosmalla, Frederik Wiehr, and Antonio Krüger. Follow the pioneers: Towards personalized crowd-sourced route generation for mountaineers. In *Proceedings of the 2017 ACM International Joint Conference on Pervasive and Ubiquitous Computing and Proceedings of the 2017 ACM International Symposium on Wearable Computers*, UbiComp '17, pages 1051–1055, New York, NY, USA, 2017. ACM

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- 2017 Felix Kosmalla, Christian Murlowski, Florian Daiber, Frederik Wiehr, and Antonio Krüger. Slackliner: An interactive assistant for slackline training. In *Proceedings of the 2017 ACM International Joint Conference on Pervasive and Ubiquitous Computing and Proceedings of the 2017 ACM International Symposium on Wearable Computers*, UbiComp '17, pages 1056–1061, New York, NY, USA, 2017. ACM
- 2017 Frederik Wiehr, Florian Daiber, Felix Kosmalla, and Antonio Krüger. Artopos: Augmented reality terrain map visualization for collaborative route planning. In *Proceedings of the 2017 ACM International Joint Conference on Pervasive and Ubiquitous Computing and Proceedings of the 2017 ACM International Symposium on Wearable Computers*, UbiComp '17, pages 1047–1050, New York, NY, USA, 2017. ACM
- 2017 Florian Daiber, Felix Kosmalla, Mahmoud Hassan, Frederik Wiehr, and Antonio Krüger. Towards amplified motor learning in sports using ems. In *Proceedings of the ACM CHI Workshop on Amplification and Augmentation of Human Perception (Amplify)*. *CHI Workshop on Amplification and Augmentation of Human Perception (Amplify-17)*, located at CHI 2017, May 7, Denver, CO, USA. Amplify, 2017
- 2016 Florian Daiber, Felix Kosmalla, Frederik Wiehr, and Antonio Krüger. Towards guidance in and life-logging of multi-pitch climbing using wearables and drones. In *Proceedings of the ACM UbiComp Workshop on Ubiquitous Computing in the Mountains (UbiMount)*. *International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp-16)*, Heidelberg. UbiMount, 2016
- 2016 Felix Kosmalla, Florian Daiber, Frederik Wiehr, and Antonio Krüger. Using off-the-shelf sensors for ad-hoc smart sole prototyping. In *Proceedings of the ACM UbiComp Workshop on Ubiquitous Computing in the Mountains (UbiMount)*. *International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp-16)*, Heidelberg. UbiMount, 2016
- 2016 Frederik Wiehr, Felix Kosmalla, Florian Daiber, and Antonio Krüger. Interfaces for assessing the rated perceived exertion (rpe) during high-intensity activities. In *Proceedings of the 2016 ACM International Joint Conference on Pervasive and Ubiquitous Computing: Adjunct*, UbiComp '16, pages 851–855, New York, NY, USA, 2016. ACM
- 2016 Florian Daiber, Felix Kosmalla, Frederik Wiehr, and Antonio Krüger. Outdoor nature lovers vs. indoor training enthusiasts: A survey of technology acceptance of climbers. In *Proceedings of the ACM CHI Workshop on Unobtrusive User Experiences with Technology in Nature (NatureCHI)*. *CHI Workshop on Unobtrusive User Experiences with Technology in Nature (NatureCHI-16)*, located at CHI 2016, May 8, San Jose, CA, USA. NatureCHI, 2016

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