



# Outline

In order to advance research in and around human-computer interaction on factories, fabrication and DIY making, this event will bring together key researchers and practitioners from varied disciplines and backgrounds. We will approach making and fabrication both from a perspective of manufacturing cultures, including, for instance, industrial and personal fabrication, as well as from hobbyist and entrepreneurial production. Although different variants of fabrication pursue various, even conflicting goals (e.g., democratizing technology, profit orientation), they all affect and are affected by society. They question, or are questioned by, forms of innovation, workplaces, and access to as well as assessment of (physical and immaterial) goods.

During this 2.5 day-long event on "Rethinking Technology Innovation: Factories, Fabrication & Design Research", a group of approx. 15 invited experts will meet for discussions in round-table sessions, working groups, as well as a public event open to other interested stakeholders. The workshop is open to student applicants of which a selection will receive travel grants.

### Organizers

Verena Fuchsberger (University of Salzburg, Austria) Silvia Lindtner (University of Michigan, USA) Martin Murer (University of Salzburg, Austria) Manfred Tscheligi (University of Salzburg, Austria & AIT - Austrian Institute of Technology)

http://hci.sbg.ac.at/ffdr

### **Confirmed List of Participants**

Jeff Bardzell (Indiana University, USA) Shaowen Bardzell (Indiana University, USA) Patrick Baudisch (Hasso Platter Institute, Germany) (tbc) Pernille Björn (University of Copenhagen, Denmark) Terry Cheng (Terry & Friends, China) Torkil Clemmensen (Copenhagen Business School, Denmark) Seth Hunter (Intel Labs, USA) Eric Pan (Seeed Studio, China) Aaron Quigley (University of St. Andrews, UK) Karin Slegers (KU Leuven & iMinds, Belgium) Suzanne L. Thomas (Intel Labs, USA) Oscar Tomico (TU Eindhoven, Netherlands) Anna Vallgårda (ITU Copenhagen, Denmark) Volker Wulf (University of Siegen, Germany)

### Participating PhD Students

Thomas Grah (University of Salzburg, Austria) Judith Igelsböck (Institut für Arbeitsforschung und Arbeitspolitik, Linz, Austria) Karim Jabbar (ITU, Copenhagen, DK) Dominik Hornung (University of Siegen, Germany) Alina Krischkowsky (University of Salzburg, Austria) Cindy Lin (University of Michigan, USA) Bernhard Maurer (University of Salzburg, Austria) Thomas Meneweger (University of Salzburg, Austria) Andreas Reiter (University of Nottingham, UK) Ashok Sivaji (MIMOS Berhad, Malaysia) Susanne Stadler (University of Salzburg, Austria) Oliver Stickel (University of Siegen, Germany) Vasiliki Tsaknaki (KTH Stockholm, Sweden) Daniela Wurhofer (University of Salzburg, Austria)

in cooperation with







# Program Overview

## 28 September 2015, 13.00 - 21.00

	<b>Soft opening brunch</b> (center tours, workspaces, wi-fi,)
13.00 - 14.30	Welcome, intro talks and introduction of participants
14.30 - 15.00	Break
15.00 - 16.30	Opening up the topic: Perspectives on Fabrication
	Panel, Provocations, and Discussion
16.30 - 17.00	Break
17.00 - 18.00	Perspectives on Fabrication - Discussing the provocations
	Working groups
18.00 - 18.30	Perspectives on Fabrication - Discussing the provocations
	Consolidation of working group outcomes
19.00	The next generation of fabrication
	A dinner at Academy Bar, spiced up with presentations

## 29 September 2015, 9.00 - 22.00

09.00 - 10.00	Fabrication, Economic Transformation & China
	Panel and Discussion
10.00 - 10.30	Break
10.30 - 12.00	Fabrication Research & Design
	Panel and Discussion
12.00 - 13.00	Brown-bag lunch
	PhD candidates discuss their thesis with experts

### PhD Students' Program

### Experts' Program

13.00

19.30

13.30	Departure from the Center
14.45 - 16.15	Plant tour
16.15 - 17.00	Transfer
17.00 - 19.00	Interactive PhD-session
19.30	Dinner, Johanneskeller, Salzburg

### Departure from the Center 14.30 - 16.30 Plant tour 16.30 - 17.00 Transfer 17.00 – 19.00 Talks & Panel Dinner, Gmachl, Bergheim

30 September 2015, 9.00 - 13.00

09.00 - 10.30 10.30 - 11.00	Rethinking Technology Innovation: Policies, Requirements, and Alternatives Summary discussion Break	
11.00 - 13.00 13.00	<b>The Future of Fabrication: Advances, Potentials &amp; Challenges</b> Taking on the workshop results with decision makers and industrial leaders <b>Get-Together</b>	public

## Venues



Sigmund-Haffner Gasse 4, 5020 Salzburg

# Program



28 September 2015,	13.00 - 21.00	participation on invitation only
	Soft opening brunch (center tours, workspaces	, wi-fi,)
13.00 - 14.30	Welcome, intro talks and introduction of parti	cipants
	<i>Welcome and introduction to the event</i> Manfred Tscheligi	
	Intro talks: Verena Fuchsberger and Martin Murer: Fabricatio Silvia Lindtner: Fabrication in China and the US	on experience
	Introduction of participants	
14.30 - 15.00	Break	
15.00 - 16.30	<b>Opening up the topic: Perspectives on Fabrica</b> Panel, Provocations, and Discussion	tion
	Panelists: Jeff Bardzell, Pernille Bjørn, Torkil Clem Seth Hunter, Anna Vallgårda Moderation: Silvia Lindtner	mensen,
	Fabrication ranging from DIY making over open s facturing is a topic that has attracted the attenti tions, researchers, and grassroots makers alike. W each of these perspectives and how has it been a	on by big governments, corpora- /hat does fabrication mean from
16.30 - 17.00	Break	
17.00 - 18.00	<b>Perspectives on Fabrication - Discussing the p</b> <i>Working groups</i>	rovocations
	Introduction: Verena Fuchsberger	
18.00 - 18.30	<b>Perspectives on Fabrication - Discussing the p</b> Consolidation of working group outcomes	rovocations
	Moderation: Verena Fuchsberger	
19.00	<b>The next generation of fabrication</b> <i>A dinner at Academy Bar, spiced up with presenta</i>	tions

Moderation: Martin Murer

### 29 September 2015, 9.00 - 13.00

09.00 - 10.00	Fabrication, Economic Transformation & China Panel and Discussion
	Panelists: Shaowen Bardzell, Terry Cheng, Cindy Lin, Eric Pan, Suzanne Thomas and special guest Hu Yong (Peking University, China)
	Moderation: Silvia Lindtner and special guest Ingrid Fischer-Schreiber (ChinaCultureDesk, Austria)
	Digital fabrication and maker culture more broadly are envisioned as crucial el- ements in stimulating economic growth, technology innovation & new models of entrepreneurship across diverse regions. To name but a few examples: Barack Obama promotes digital fabrication as carrying the means to bring back "made in America"; the Chinese government is funding the build up of so-called "mass makerspaces" to spurt entrepreneurship and innovation alongside existing man- ufacturing know-how; Taiwan supports the build of makerspaces and fablabs to further support their aims at building a creative economy that can compete in a geopolitical climate and economy increasingly dominated by China. At the same time, China, and with it the global economy, has recently witnessed anoth- er round of turmoil, rooted in part in the slowdown of China's economy. In this panel, experts will discuss what is at stake as the hopes and visions of the maker movement are confronted with an increasingly unstable economic and political climate in China and worldwide. What is the future of fabrication with China as- serting its dominance in global economy and the global maker movement? In which ways could alternative histories and cultures of making in Asia be a model for fabrication in the West?

### 10.00 - 10.30 Break

### **10.30 – 12.00** Fabrication Research & Design Panel and Discussion

Panelists: Aaron Quigley, Karin Slegers, Oscar Tomico, Anna Vallgårda, Volker Wulf Introduction & Moderation: Jeff Bardzell

Making and digital fabrication have been celebrated as new models for broken educational systems and new arenas of technological innovation. In its utopian vision, digital fabrication is part of a global movement, with local manifestations. This also questions traditional production processes, such as mass production and industrial manufacturing. This panel will center on questions around how to research fabrication, such as local making cultures, industrial production, as well as their histories and ties into global relations and politics. What challenges and opportunities do fabrication cultures hold for interdisciplinary fields like HCI and Interaction Design, and for approaches like research through design? What role does making play as a means of research? Which characteristics do production and making have that should be taken seriously and, how is it different from other domains? Is making simply a hype? How can we extend from the hype into sustainable models that retain both the idealism of the maker movement and constitute programmatic steps for fabrication?

12.00 - 13.00

PhD candidates discuss their thesis with experts

**Brown-bag lunch** 

### 29 September 2015, 9.00 - 13.00

### participation on invitation only

### Excursion: Putting the discussion in context

(PALFINGER)

Palfinger is an internationally operating company that produces hydraulic lifting solutions for use on commercial vehicles and in the maritime field (e.g., loader cranes). Its headquarter is in Salzburg, manufacturing and assembly sites are located in Europe, North and South America, and Asia.

DhD Stud	ents' Program
FIID Stud	ents program

 13.30
 Departure

 14.45 - 16.15
 Plant tour

16.15 - 17.00 Transfer

17.00 - 19.00 Interactive PhD-session

Discussing problems, issues and open questions regarding your PhD

Moderation: Alexander Meschtscherjakov

**19.30 Dinner** Johanneskeller, Salzburg

Experts' Program	
13.00	Departure
14.30 - 16.30	Plant tour
16.30 - 17.00	Transfer
17.00 - 17.30	<b>Industry 4.0 at Palfinger</b> Lecturer: Martin Zehnder (Palfinger AG)
17.30 - 18.15	<b>Next steps in industrial digitization</b> Lecturers: Michael Mey and Joachim Seidelmann (HP Germany)
18.15 - 19.00	The Human Centric Viewpoint in Fabrication: Rethinking Innovation Panel Discussion
	Panelists: Terry Cheng, Seth Hunter, Silvia Lindtner, Eric Pan Moderator: Manfred Tscheligi
19.30	<b>Dinner</b> Gmachl, Bergheim

The two lectures will address current issues in production and "Industry 4.0". "Industry 4.0", a term that originated recently from German speaking countries, refers to ongoing trends in automation and industrial production. Industry 4.0 extends from previous trends in factory automation and propells forward the visions of a model of increasingly flexible and customized production. This has consequences for the organization of work and labor, such as a shift from operational work to monitoring activities, requiring specific education and training. After these two lectures, we will reflect the previous discussion in a panel that focuses on both the challenges and opportunities this new model of fabrication holds.

### 30 September 2015, 9.00 - 13.00

participation on invitation only

09.00 - 10.30**Rethinking Technology Innovation: Policies, Requirements, and Alternatives** Moderation: Manfred Tscheligi In order to rethink technology innovation, we need to reflect on the status quo, on challenges and opportunities, as well as changes and trends. In this panel, we will discuss different perspectives on fabrication as they occurred throughout the previous two days. We will focus in particular on how conference participants discussed fabrication and how it relates to contemporary shifts in industry, policy, entrepreneurship, design, society, and research in order to draw out implications for the future of fabrication. What questions are important and remain unanswered? What problems do we need to solve? How can we develop alternative solutions and spaces? Break 10.30 - 11.00 11.00 - 13.00 The Future of Fabrication: Advances, Potentials & Challenges Taking on the workshop results with decision makers and industrial leaders **Panelists** Georg Bauer (Sony DADC Austria AG) Terry Cheng (Terry & Friends, China) Suzanne Thomas (Intel Labs, USA) Martin Zehnder (Palfinger AG, Austria) Moderation: Manfred Tscheligi This panel will start with an overview of the results gained during the event, rangas the conclusion they drew based on their participation in the workshop. Policy makers and industry representatives are invited to complement and discuss these perspectives in order to take up on the findings from the event to situate 13.00 **Get-Together** 



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Christian Doppler Laboratory Contextual Interfaces The financial support by the Austrian Federal Ministry of Science, Research and Economy and the National Foundation for Research, Technology and Development is gratefully acknowledged.

## Participants



## Participants



### Jeff Bardzell (Indiana University, USA)

Jeffrey Bardzell is an Associate Professor of HCI/Design at Indiana University. He brings a humanist perspective to HCI and is best known for bringing critical perspectives into HCI, e.g., in his research on interaction criticism, aesthetics, and critical design. His interest in maker culture extends his prior research on the co-emergence of tools, communities of practice, and aesthetic vocabularies in amateur creative communities, ranging from traditional craft communities to online multimedia authoring communities.

### Shaowen Bardzell (Indiana University, USA)

Shaowen Bardzell is an Associate Professor in the School of Informatics and Computing and the Affiliated Faculty of the Kinsey Institute at Indiana University. Bardzell leverages her background in the humanities to study technology in use, with an emphasis on participatory, intimate, and embodied experiences. One thread of her recent work has focused on how making and criticality intersect, especially in the context of national and cultural identity, local material resources, and community activism.

### Patrick Baudisch (Hasso Platter Institute, Germany) (tbc)

### Pernille Björn (University of Copenhagen, Denmark)

Pernille Bjørn is Professor in Computer Supported Cooperative Work (CSCW) at University of Copenhagen, at the Computer Science Department. She specializes in conceptualizing collaborative work arrangements and is mostly known for her CSCW work in healthcare and global software development. Currently, she is interested in unpacking the ways in which Makers engage and collaborate shared knowledge and ideas as prominent aspects of their work. In particular she is interested in exploring the opportunities for new born global companies arising out of the Maker communities, and how best practices for distributed work practices can be created based upon previous research on global software development, however particular adjusted to fit nature of the Maker communities.

### Terry Cheng (Terry & Friends, China)

Terry Cheng, former President of China HP, former President of TI Asia, former Executive VP of Foxconn Technology Group, and former CEO of Foxconn International Holding. Retired in 2012 and joined the maker movement in China. In 2014, with the help of ShenzhenWare, the community for makers and hardware startups, Terry builds Terry & Friends group, mentoring young makers on the startup journey.

#### Torkil Clemmensen (Copenhagen Business School, Denmark)

Torkil Clemmensen, PhD, Professor mso at Department of IT Management, Copenhagen Business School, Denmark. His interest is in Human-Computer Interaction, in particular psychology as a science of design. The focus of his research is on cultural psychological perspectives on usability and user experience. As chair of International Federation of Information Processing (IFIP), TC Human-Computer Interaction's Working Group 13.6 on Human Work Interaction Design (HWID) 2009-2014, he has co-organized a series of international working conferences on work analysis and usability/user experiences in organisational, human, social and cultural contexts. He has been involved in EU, Danish, and International research projects.

### Seth Hunter (Intel Labs, USA)

Seth Hunter is a research scientist at Intel Labs in Santa Clara, California. He has a background in art, technology and design through his masters work at the Art Institute of Chicago and his Doctorate work at the MIT Media Lab. At Intel he leads Open Source Hardware Advocacy and Research and develops new types of 3D displays for the Computational Imaging Lab. His primary interest is how technology can facilitate new creative and social experiences. At home and at work he is a maker – and has recently been researching how to productize some of the ideas he has developed over the last 10 years.

### Eric Pan (Seeed Studio, China)

Eric Founded Seeed Studio with the goal of helping makers obtain open-source hardware modules and helping innovators turn ideas into products. Founded Chaihuo Maker Space in 2011, brought Maker Faire to Shenzhen since 2012, Eric takes active parts in pushing forward development of maker culture, strengthening the communication and crossover cooperation among makers in China & abroad. In 2012, he was also an operational partner of HAXLR8R (a hardware incubator). In 2013, Eric Pan was picked by Forbes China on "30 Under 30" list of top Chinese entrepreneurs under the age of 30.

### Aaron Quigley (University of St. Andrews, UK)

Professor Aaron Quigley is the Chair of Human Computer Interaction and deputy Head of School in Computer Science at the University of St Andrews in Scotland. He is co-founder and director of SACHI, the St Andrews Computer Human Interaction research group. He is the ACM SIGCHI Adjunct Chair for Specialized Conferences and a board member of ScotlandIS. And he has held academic and industry appointments in Australia, Japan, USA, Germany, Ireland and the UK. Recent developments locally have extended his research scope to explore material HCI, industrial and personal fabrication in both research, teaching and lightweight engineering.

## Participants



Karin Slegers is assistant professor and senior researcher at the Centre for User Experience Research (KU Leuven & iMinds). Her current research within HCI is mostly situated in the health domain (e.g. support with activities of daily living and patient empowerment). In addition, she likes to work on novel research methodologies, such as participatory design for people with impairments, the use of board game mechanisms in research and making new technologies, such as Internet of Things and digital fabrication, accessible for end-users in a meaningful way. Karin is involved in a series of academic workshops (e.g. at CHI, INTERACT and the Participatory Design Conference) and publications about involving people with impairments in the design process.

### Suzanne L. Thomas (Intel Labs, USA)

Suzanne L. Thomas, PhD, is a senior research scientist at Intel Labs. She brings an ethnographic sensibility to the study of ecosystems and economies. In the last two decades, her work has spanned the growth of primetime television production in China, rural-to-urban migration and economies in China, the work of e-learning in school systems worldwide and more recently who codes the industrial Internet of Things. In her spare time, she and her partner corral their own ecosystem of kids and cats in San Francisco, CA.

### **Oscar Tomico (TU Eindhoven, Netherlands)**

Oscar Tomico is an assistant professor of the Designing Quality in Interaction Research Group, and part of Wearable Senses at Eindhoven University of Technology. Current projects focus on the textile industry and involve stakeholders during the design process to foster cooperation to frame the design space, collaboration space and reformulate the design opportunity. He is project leader of Smart Textile Services (CRISP 2011), a partner in Crafting Wearables (CLICKNL 2013) and ArcInTexETN (H2020 2015). He co-organized events like (Wearable) Tech meets Design (Eindhoven, 2015), Careful Designs and Hypercrafting Fashion (Amsterdam, 2012 to 2014), and Crafting Wearables breakout (MoBA, Arnhem, 2013).

### Anna Vallgårda (ITU Copenhagen, Denmark)

Anna Vallgårda is the head of the IxD lab and an assistant professor at the IT University of Copenhagen. After finishing her PhD at ITU on the topic of the computer as a material for design she did a two-year post doc at the Swedish School of Textile working with smart textile and interaction design. Her research is about developing Interaction Design as a material and form-giving practice. As such she is working to expand our understanding of the trinity of forms in Interaction Design: the physical form, the temporal form, and the interaction gestalt.

### Volker Wulf (University of Siegen, Germany)

Volker Wulf holds the Chair of Information Systems and New Media at the University of Siegen. He is also the Managing Director of the School of Media and Information (iSchool) at the University of Siegen. In addition, he heads the business field of User-oriented Software Engineering (USE) at the Fraunhofer Institute for Applied Information Technology (FhG-FIT) in Sankt Augustin. After completing a double degree in Computer Science and Business Administration at the RWTH Aachen and the University of Paris VI, he gained his PhD at Dortmund University. Since 2011 he has officiated as Dean of Faculty III (School of Economic Disciplines) at the University of Siegen. His research interests lie primarily in the area of IT system design in real-world contexts. This includes the development of innovative applications from the areas of cooperation systems, knowledge management and community support.



### Thomas Grah (University of Salzburg, Austria)

Thomas Grah is a Research Fellow at the Center for Human-Computer Interaction at the University of Salzburg. He describes himself as an interaction designer, researcher, and tinkerer. His main focus lies on design driven research around sensory augmentation and tangible interaction. He holds an MA in Media Direction and a BA in Digital Media – Interactive Media Design from University of Applied Sciences Darmstadt. In his recently started dissertation, Thomas explores the potentials of haptic sensory augmentation for ambient persuasion and training during demanding main tasks (i.e., driving a car).

### Dominik Hornung (University of Siegen, Germany)

Dominik Hornung is a research associate in the group for Information Systems and New Media at the University of Siegen where he graduated in Human Computer Interaction. Currently, his main field of research is IT for the Ageing Society. Besides, he's very interested in digital fabrication, DIY, Making and one of the co-founders of the local Fab Lab in Siegen.

#### Judith Igelsböck

### (Institut für Arbeitsforschung und Arbeitspolitik, Linz)

HCI, then Science and Technology Studies, and now Advanced Manufacturing; Applied research, basic research, and now in the middle of a 'triple helix' of industry, politics, and academia; Does she not know what she wants, or is working across disciplines just her way to be? In her thesis, Judith engages with forms of participation in transdisciplinary research. In her current work-life she is concerned with changing worlds of work against the background of fantasies of seamlessly automated production-networks, such as 'Industrie 4.0'.

### Karim Jabbar (ITU, Copenhagen, DK)

Karim Jabbar holds an M.Sc. in International Business Administration from Copenhagen Business School (2001). He is currently doing an Industrial PhD in the intersecting areas of Innovation, CSCW, and HCI. His experience is primarily as a practitioner and academic instructor (Innovation and Entrepreneurship). Karim is full time faculty at the Danish Institute for Study Abroad and external lecturer at the Copenhagen Business School.

#### Alina Krischkowsky (University of Salzburg, Austria)

Alina Krischkowsky is a Research Fellow at the Center for Human-Computer Interaction (University of Salzburg). She holds a Master's Degree in Sociology (2010) from the University of Salzburg. She joined the team in May 2011 and has been involved in several national and international EU-projects. She is further engaged in the Christian Doppler Laboratory "Contextual Interfaces", doing basic research in the field of Computer-Supported Cooperative Work (CSCW). In her PhD dissertation, she focuses on social roles as an analytical tool to investigate, understand, and conceptualize offline and online collaborative processes in various contexts (e.g., corporate social media, health care, production environments) thereby addressing the offline/online binary. In particular, Alina is interested in informing online collaboration with knowledge from offline social roles to seamlessly integrate online collaboration into offline practices.

#### Cindy Lin (University of Michigan, USA)

Cindy Lin is a PhD student from the School of Information, University of Michigan, Ann Arbor. Her PhD research centers on how vernacular knowledges and artefacts have informed recent maker culture and how potential alliances and conflicts can emerge from maker-corporate-government collaborations in Indonesia. More specifically, this research pays attention to the cultural origins of tinkering, preexistent practices of technological appropriation, reverse engineering and tech scavenging to explain the practices observed in contemporary hacker and maker collectives. Her previous ethnographic work involved an extensive seven months fieldwork on the politics of DIY maker culture in Indonesia and the (unequal) flows of scientific and technological information across nation-state boundaries.

### Bernhard Maurer (University of Salzburg, Austria)

Bernhard Maurer has a background in game design and development and holds a Master's Degree in Multi Media Technology from the University of Applied Sciences Salzburg. Since 2013 he works as a research fellow at the Center for Human-Computer Interaction at the University of Salzburg. He has been involved in a variety of research activities in the industrial and automotive domain working in close cooperation with industry partners in the field of fabrication, automation and technologies for demanding working contexts. His PhD research explores embodied interaction as a stance towards game design and investigates physical and social context qualities as a design material for digital play. His design and research activities are driven by seeing the human as a ludic being and creating playful systems as a research method and lense for HCI.



### Thomas Meneweger (University of Salzburg, Austria)

Thomas Meneweger is working as a Research Fellow at the Center for Human-Computer Interaction. He holds a Master's Degree in Sociology from the University of Salzburg (2011). Since he joined the group in July 2010, his research focuses on qualitative research methods and user experience research. Currently, Thomas is working on narrative methods for the exploration of user experience in production environments. The working title of his PHD thesis is "Everyday Interactions with Technology in Production Environments: Accessing (Non-) Ordinary Experiences in Verbal Expressions by Means of Qualitative Interviews".

#### Andreas Reiter (University of Nottingham, UK)

Andreas Reiter is an early-stage PhD Student in the Mixed Reality Laboratory of the School of Computer Science and Horizon CDT at the University of Nottingham, UK. His research investigates the social organization of work practice within UK Hacker-/Maker Communities, with the intent of creating design to augment and facilitate Innovation. He is one of the founding members of the OTELO Open Technology Laboratories in Vorchdorf (Austria), which aims at enabling citizens with public and free access to rapid prototyping tools in rural Austria. He organized a RCUK Digital Economy Network Maker's Workshop around MakerFaireUK 2014.

### Ashok Sivaji (MIMOS Berhad, Malaysia)

Ashok Sivaji is currently pursuing a PhD at the National University of Malaysia. He holds a MSc IT from Uni. Tek. PETRONAS, Malaysia and BEng (Hon) from The University of Adelaide, Australia. Currently, he is a Senior Manager and UX Lab Lead at MIMOS Berhad Malaysia. Previously he worked as an electronic instrument and semiconductor manufacturing engineer at Hewlett Packard, Agilent Technologies and Texas Instruments. His PhD revolves deriving user experience testing methodologies and tools that are culturally targeted for high power distance culture.

### Susanne Stadler (University of Salzburg, Austria)

Susanne Stadler is working as a Research Fellow at the Center for Human-Computer Interaction. She holds a Master's Degree in Applied Computer Science from the University of Salzburg, 2015. She joined the Center for Human-Computer Interaction in August 2011. Her work investigates factors that determine the acceptance of robots with different appearance and how kinesthetic teaching with an anthropomorphically-designed robot is perceived by people with different backgrounds in the factory context. Her research interests include human-robot interaction and collaboration, robot autonomy, robot programming and augmented reality approaches.

#### **Oliver Stickel (University of Siegen, Germany)**

Oliver is a PhD student at the University of Siegen in the research group for CSCW & Social Media. He has a background in HCI (MSc) as well as Psychology & Applied Computer Science (an interdisciplinary BSc) and has worked as a visiting researcher at Birzeit University, West Bank, Palestine. If asked, he describes himself a researcher, maker and a minimalist. Those traits culminated in founding Fab Lab Siegen as an infrastructure for research, teaching, an outlet for creativity, exploring alternative economic approaches as well as for resilience. Work along all those branches and the pitfalls that come with them such as the inevitable involvement in politics - will keep Oliver busy for the next few years.

### Vasiliki Tsaknaki (KTH Stockholm, Sweden)

Vasiliki Tsaknaki is a PhD candidate in interaction design at KTH Royal Institute of Technology and Mobile Life Research Centre, in Stockholm. She graduated from the department of Product and Systems Design Engineering, University of the Aegean in Greece (5 years study program) and she has also studied as an exchange student at Köln International School of Design in Cologne and Weissensee School of the Arts in Berlin, at the department of Textile and Surface Design. Currently working in the Arts & Crafts project at Mobile Life Centre, she is studying various crafting processes and techniques emerging during post-industrial times, but also a number of 'traditional' materials brought in Interaction design.

### Daniela Wurhofer (University of Salzburg, Austria)

Daniela Wurhofer works as a Research Fellow at the Center for Human-Computer Interaction. She holds a Master's Degree in Psychology (2006) and a Bachelor's Degree in Applied Computer Science (2007). Daniela joined the team in October 2007 and was involved in several national and international projects like the EU-projects CITI-ZEN MEDIA and ROBOT@CWE, where she focused on the evaluation of user experience, social acceptance, and societal impact. Furthermore, she was engaged in the development of patterns fostering a more positive user experience (UX Patterns). Currently, Daniela is doing research in the area of user experience in production environments and Industry 4.0. She is further engaged in the Christian Doppler Laboratory "Contextual Interfaces", doing basic research in the fields of user experience and contextual research methods. In particular, she is exploring temporal transitions of user experience in order to characterize how UX changes on both a theoretical and empirical level.

## Organizers

### Verena Fuchsberger (University of Salzburg, Austria)

Verena Fuchsberger is a Postdoctoral Research Fellow at the Center for Human-Computer Interaction, University of Salzburg. She has completed her Master's Degree in Educational Sciences and Psychology at the University of Innsbruck and recently finished her PhD in HCI at the University of Salzburg. In her research, Verena focuses on the agency of human and non-human actors in HCI and interaction design. In particular, she is interested in the materiality of interactions, which she investigates also in industrial contexts, such as a semi-conductor factory.

### Silvia Lindtner (University of Michigan, USA)

Silvia Lindtner is an assistant professor at the University of Michigan in the School of Information, with affiliations in the Lieberthal-Rogel Center for Chinese Studies and the Science, Technology and Society Program. Her research investigates the role digital technologies play in global processes of innovation, work and labor, as sites of expressions of selfhood and collectivity, and in relation to political, social and economic processes of urban redesign. She explores these themes through a contemporary research project; maker and hacker cultures, with a particular focus on intersections with manufacturing and creative industry development in China. She has published in various disciplines such as HCI, CSCW, STS, and China studies, and has organized workshops at Ubicomp and CHI in 2009, 2010 and 2011 as well as international workshops and conferences on making and manufacturing cultures 2011-2014.

### Martin Murer (University of Salzburg, Austria)

Martin Murer is an Interaction Designer and Researcher at the Center for Human-Computer Interaction, University of Salzburg. He focuses on design driven research around tangible, embedded and embodied interaction. He holds a Master's Degree in Information Design from University of Applied Sciences Graz. Since 2008, Martin was involved in multiple national and international research projects at the Center, contributing his designs and research activities to industrial, automotive, and domestic applications. Being enthusiastic about taking things apart, Martin works towards a PhD that seeks to explore de-constructive practices (e.g., un-crafting, taking things apart) in the realm of interactive systems and interaction design.

### Manfred Tscheligi (University of Salzburg, Austria & AIT – Austrian Institute of Technology)

Manfred Tscheligi is professor for HCI & Usability and director of the Center for Human-Computer Interaction at the University of Salzburg. He further is head of the business unit Technology Experience at the Austrian Institute of Technology. He leads a variety of research projects that investigate human-computer interaction in industry, for instance, the Christian-Doppler Laboratory on "Contextual Interfaces", a seven years industry-research cooperation. He has been initiating and managing a broad variety of research and industrial projects and initiatives within Austria and on the international level. Being a member of various national and international expert, advisory, and conference committees (e.g., CHI conference series, Mobile HCI conference series, Human-Robot Interaction conference series), his work is based mainly on the interdisciplinary synergy of different fields to enrich the interaction between humans and systems.

in cooperation with



S A L Z B U R G





Christian Doppler Laboratory *Contextual Interfaces* 

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