



SARAH THERES VÖLKE

UX RESEARCHER / DOCTORAL CANDIDATE

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Profile I'm a 4th-year PhD candidate investigating highly personalised intelligent systems that keep the user in control. My background is in Computer Science (BSc), HCI (MSc, BSc), and Psychology. I'm well versed in both quantitative and qualitative research methods, leveraging the power of text analytics and ML for qualitative analysis. As a co-operation PhD student at Audi, I've gained insights into industrial research. I'm passionate about project management and engaging teams for (volunteer) work.

EDUCATION

since 07/2017

PhD in Human-Computer Interaction

Media Informatics Group | LMU Munich | Munich

- PhD topic: Personality: An Influencing Factor in User Interaction with Everyday Intelligent Systems

10/2013 - 11/2016

M.Sc. Technical Communication & Computer Science

RWTH Aachen University | Aachen | grade: excellent (1.3)

- Focus: HCI, eLearning, technology acceptance, data mining, practical research projects

08/2014 - 12/2014

International Student

Brock University | St. Catharines | Canada

- Focus: Human motivation, social psychology, professional communication

10/2009 - 09/2015

B.Sc. Computer Science

RWTH Aachen University | Aachen | grade: good (1.7)

- Focus: UX, usability, designing interactive systems

10/2010 - 09/2013

B.Sc. Technical Communication & Computer Science

RWTH Aachen University | Aachen | grade: excellent (1.5)

- Focus: Research methods, cognition, interface design

08/2000 - 06/2009

Abitur (University Entrance Exam)

<Please contact for personal information> | grade: A (1.4)

EXPERIENCE

since 07/2017

Research Associate

Media Informatics Group | LMU Munich | Munich

- Conducting research on conversational UIs, personality-tailored personalisation, transparent & controllable AI
- Leading research projects in teams of 3 to 9 people
- Teaching Master & Bachelor classes, e.g., "Intelligent UIs"
- Supervising more than 40 theses/project/seminar students
- Organising lab events (e.g., Open Lab Day, Internal Doctoral Colloquium) and internal processes (e.g., GDPR regulations)

07/2017 - 06/2020

Cooperation Doctoral Student for User Experience

Series Development UX | Audi AG | Ingolstadt

- Developing concepts as well as implementing and evaluating prototypes in the interdisciplinary research project "User-centred machine learning for vehicles"
- Consulting on the personalisation of voice assistants
- Giving workshops for different audiences

12/2016 - 03/2017, 04/2016 - 05/2016,

User Experience Student Assistant / Intern

bitstars GmbH | HoloBuilder, Inc. | Aachen

- Testing the usability of an AR/AV application
- Developing interactive tutorials to improve web app's UX

10/2013 - 12/2016

Student Assistant in Interdisciplinary Research Projects

HCI Centre | RWTH Aachen University | Aachen

- Preparing and conducting interviews and focus groups
- Designing experiments and evaluating findings
- Developing low fidelity prototypes

04/2013

Scientific Junior Associate

Media Computing Group | RWTH Aachen University | Aachen

- Implementing & evaluating a feature for an iPhone app

04/2011 - 07/2011, 04/2012 - 07/2012

Student Assistant for a Tutorial

Logic & Theory of Discrete Systems | RWTH Aachen University

AWARDS

05/2020

Honourable Mention Award (Top 5% of Submissions)

Proceedings of the CHI '20 Conference

03/2019

Outstanding Paper Award (Top 5% of Submissions)

Proceedings of the IUI '19 Conference

2013, 2011

DeansList of RWTH Aachen University

Honours for study achievements

2009

Silver Coin for Valedictorian Honour

Silver Coin for Special Social Commitment

Awarded by the school's support association

SKILLS

Project Management & Organisation

Structuring processes, managing teams, certificate for event management

Qualitative Research Methods

Interviews, focus groups, thematic analysis, grounded theory, inductive open coding

Experimental Design

Designing suitable experiments with respect to validity, reliability, and replicability

Data Analysis

Python, R, text analytics, NLTK, Google Natural Language API, Mallet, Gensim, TensorFlow, Keras, Scikit

Web, App, and Conversational UI Development

JavaScript, HTML, CSS, Java, Python, jQuery, DataTables, Bootstrap, MongoDB, MySQL, Alexa Skills Kit, Telegram Bot

Research Tools

Lo-fi prototyping, user journeys, wireframes, Processing

Design

Adobe Photoshop, Illustrator, & InDesign

German

mother tongue

English

fluent

French

basic

Spanish

basic

SELECTED PROJECTS

A Personality Model for Voice Assistants

We developed a new multi-method approach to collect potentially descriptive adjectives to describe voice assistant personality using text analytics and qualitative analysis. We aggregated the results into a set of 349 adjectives, which were then rated by 744 people in an online survey. Conversation designers can use our results to develop consistent, unique agent personalities in a systematic way.

User-reported Problems with Intelligent Systems

We analysed 45,448 reviews of four apps on the Google Play Store (Facebook, Netflix, Google Maps, and Google Assistant) with sentiment analysis, topic modelling, and manual analysis to reveal user problems. We enriched this data with users' coping and support strategies through a follow-up online survey. Our method can be adopted to identify specific user problems in large amounts of data. Our findings can be used to design intelligible and controllable user experience for everyday intelligent systems.

Lead Developer for Mobile Sensing App

We developed an Android application in a multi-disciplinary research project, which automatically collects longitudinal behaviour data. From 2017-18, I was the lead developer, managing a team of six student developers. During this time I restructured the implementation processes to meet the requirements of collecting new data types, compatibilities with new Android versions and smartphones, as well as privacy and data protection regulations. Subsequently, several companies and research institutions worldwide requested to use our PhoneStudy app.

SCHOLARSHIPS & GRANTS

since 01/2020

Admission into the Faculty Mentoring Program

Honours for PhD study achievements

01/2019

SIGCHI Travel Grant

For supporting the SIGCHI Executive Committee as volunteer

2017 - 2020

Grant for PhD studies by Audi AG

3-year funding for PhD studies awarded by the Audi AG

2014

Scholarship for International Travels

Awarded by the German National Academic Foundation

since 2012

Admission into German National Academic Foundation

Honours for study achievements and social commitment

VOLUNTEER WORK

since 03/2020

Project Manager and Front-end Developer

Retla e.V. | Munich

- Developing a website and online data management solution to register seniors and helpers and match them as phone pals
- Project management, communicating with stakeholders
- Developing the front-end using HTML, CSS, JavaScript, jQuery, Bootstrap, DataTables

since 03/2020

Private Tutor during School Lockdowns

Corona School e.V.

- Tutoring a pupil online in Math, Computer Science, & German

01/2015 - 12/2016, 03/2014 - 08/2014

Head of Team

University's Welcome Week Team | RWTH Aachen University

- Organising the university's Welcome Week for 8,000 students and coordinating the 2,000 involved helpers
- Managing the 17-person team and communicating with project partners from the university and Aachen city
- Developing the financial concept & acquiring sponsoring
- Representing the project at the university and in the press

05/2015 - 04/2017

Project Manager for Strategy Development

Students' Union Executive Committee | RWTH Aachen University

- Developing the strategic and innovative orientation
- Organising conceptual workshops and public relations

2015/2016

Deputy Member, Member of the Committee for Mobility

Student Parliament | RWTH Aachen University

10/2011 - 05/2016

Deputy Head of Welcome Week

Student Council for Communication Science | RWTH Aachen

- Mediating and communicating between students and university regarding education quality