Luca-Maxim Meinhardt

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UX Researcher and Designer

I am a **UX researcher and designer** with an interdisciplinary background across Human-Computer Interaction, UX design, and marketing, combining academic rigor with applied industry experience. My work integrates **qualitative** and **quantitative** research methods, ranging from interviews and workshops to prototyping and statistical analysis of (user study) data to optimize and evaluate user-centered interfaces.
Having worked in **agile, cross-functional environments in both industry and research**, I specialize in bridging user insight, design, and business strategy. At **Corporate Research and Technology – Carl Zeiss AG**, I developed a mobile diagnostic application that led to a European patent, and regularly communicated outcomes to stakeholders within SCRUM cycles. At **AUDI AG**, I collaborated with external design agencies to align digital and social-media marketing campaigns with the national brand strategy.

Skills (Selection)

Qualitative Methods: Participatory Design, Design Thinking, Workshops, Interviews, Thematic Analysis
Quantitative Methods: Statistical Analysis, Bayesian Optimization, Linear Mixed Models, Bayesian Statistics, Field Studies, Longitudinal Studies, Experience Sampling
Design: User-Centered Design, UI/UX (Hardware) Prototyping, Image/Video Editing, Editorial/Motion/Web Design, 3D Modeling, (Social Media, Digital) Marketing
Workflow: Agile/SCRUM, Cross-functional Collaboration, Academic Writing, Grant Writing
Programming: Python, R, Swift, JavaScript, PHP, C, C++

Professional Experience

ULM UNIVERSITY - Chair of Human-Computer Interaction — Ulm, Germany
Research Associate — Feb 2022 – Present

- Lead research in HCI using *qualitative* (interviews, workshops, thematic analysis) and *quantitative* (statistical analysis, Bayesian optimization, gaze-analysis) methods on software and hardware interfaces
- Planned and directed 30+ user research studies with up to 250 participants, across VR simulations, accessibility, and social media applications
- Collaborated with international research scholars (e.g., USA, South Korea, Switzerland) on cross-lab projects
- Supervised 20+ undergraduate and graduate students, ranging from conception, data analysis, and publication

CARL ZEISS AG - Corporate Research and Technology — Oberkochen, Germany
Master's Thesis Candidate — Apr 2021 – Nov 2021

- Designed and prototyped an iOS application using Swift and OpenCV for self-diagnosing corneal astigmatism; contributed to an EPO patent (EP4586881A1).
- Integrated user-guided workflows and computer vision to enable intuitive mobile diagnostics.
- Collaborated with cross-functional teams (algorithms, patents, development) in Agile/SCRUM workflow
- Delivered research-driven design recommendations to stakeholders

AUDI AG - Marketing and Brand Experience — Ingolstadt, Germany
Marketing and Project Management Intern — Nov 2018 – Apr 2019

- Managed 3 classic/digital/social media campaigns
- Organized Audi's social media brand marketing at the Berlinale Film Festival (Berlin) and Online Marketing Rockstars (Hamburg)
- Collaborated with event teams and external creative agencies to align campaigns with national brand strategy

KOLLE REBBE (Accenture Interactive) — Hamburg, Germany
Digital Art Intern — Mar 2018 – Aug 2018

- Designed and conceptualized social media marketing campaigns for global brands (e.g., AUDI)
- Collaborated with cross-functional teams (copywriters, strategists) to align campaigns with client goals, streamlining workflows for 50+ design works (social media videos/postings, digital ads, etc.).

Education

Ulm University — Ulm, Germany
Doctor of Science (PhD), Human-Computer Interaction — Feb 2022 – April 2026
Thesis Title: Special Information Needs in Emerging Automated Transportation Systems
Research Areas: Future Mobility, Digital Well-being, Infinite Scrolling

Santa Clara University — Santa Clara, CA, USA
Visiting Researcher at Human-Computer Interaction Lab — Jan 2025 – Feb 2025
Research Area: Digital Well-being

University of Siegen — Siegen, Germany
M.Sc. Human-Computer Interaction — Oct 2019 – Dec 2021

Industry Collaboration Project with BOSCH GmbH

- Led a 3-student research initiative with Bosch to address driver inattentiveness in partially automated driving
- Designed and prototyped an ambient-display HMI concept to reduce distraction and improve system awareness
- Outcome: Prototype was adopted and field-tested by Bosch in real-road environments

Master's thesis at CARL ZEISS AG - Corporate Research and Technology
Published parts of the thesis at ACM CHI '23: 10.1145/3544549.3585799 and as an EPO patent: EP4586881A1

Ostfalia University of Applied Sciences — Salzgitter, Germany
B.A. Media Design — Sep 2015 – Nov 2018

Publications and Patents (Selection)

L.-M. Meinhardt, S. Demharter, M. Rietzler, M. Colley, T. Eßmeyer, E. Rukzio (2025). *Mind Games! Exploring the Impact of Dark Patterns in Mixed Reality Scenarios.* PACMHCI '25. 10.1145/3743709. *Acceptance rate: 27.2%*

L.-M. Meinhardt, L. Wilke, M. Elhaidary, J. von Abel, P. Fink, M. Rietzler, M. Colley, E. Rukzio (2025). *Light My Way. Developing and Exploring a Multimodal Interface to Assist People With Visual Impairments to Exit Highly Automated Vehicles.* Proceedings of the ACM CHI '25. 10.1145/3706598.3713454. *Acceptance rate: 24.9%*

L.-M. Meinhardt, M. Elhaidary, M. Colley, M. Rietzler, JO Rixen, A. Purohit, E. Rukzio (2025). *Scrolling in the Deep: Analysing Contextual Influences on Intervention Effectiveness during Infinite Scrolling on Social Media.* Proceedings of the ACM CHI '25. 10.1145/3706598.3713187. *Acceptance rate: 24.9%*

L.-M. Meinhardt, C. Schramm, P. Jansen, M. Colley, E. Rukzio (2025). *Fly Away: Evaluating the Impact of Motion Fidelity on Optimized User Interface Design via Bayesian Optimization in Automated Urban Air Mobility Simulations.* Proceedings of the ACM CHI '25. 10.1145/3706598.3713288. *Acceptance rate: 24.9%*

L.-M. Meinhardt, M. Rück, J. Zähnle, M. Elhaidary, M. Colley, M. Rietzler, E. Rukzio (2024). *Hey, What's Going On? Conveying Traffic Information to People with Visual Impairments in Highly Automated Vehicles: Introducing On-Board.* Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies 2024. 10.1145/3659618. *Acceptance rate: 20-25%*

D. Dobbelstein, L. Stoppe, **L.-M. Meinhardt**, M. Wald, A. Leube (2026). *Computer-Implemented Method and Devices for Determining at Least One Astigmatism Parameter of at Least One Eye of a Person.* EPO Patent. EP4586881A1

Secured Funding

I have independently acquired research funding and **managed project budgets**, while supervising student researchers in executing studies and preparing joint publications.

Graduate & Professional Training Center Ulm (2024)
Context- and Content-Specific Interventions for Infinite Scrolling on Social Media Platforms. Principal Investigator
Amount: €10,000