

Pascal Jansen

Research Associate
Ulm University, Institute of Media Informatics



Web <https://www.uni-ulm.de/en/in/mi/institute/staff/pascal-jansen/>

Email pascal.j2@gmx.de

Nationality German

Date of Birth 4 June 1996

Languages German (Native)
English (Proficient)
French (Intermediate)

Current Position

Research Associate

June 2021 – Present

Ulm University, Institute of Media Informatics, Human-Computer Interaction group

As a research associate and Ph.D. candidate, I specialize in human-computer interaction, focusing on developing intelligent systems and advanced automotive user interfaces for the future of mobility.

Education

Dr. rer. nat. (PhD) in Human-Computer Interaction

June 2021 – Present

Ulm University, Institute of Media Informatics, Human-Computer Interaction

Preliminary Title:

A Framework for Computational User-Centered Optimization of Human-Vehicle Interaction Design

Advisor: Prof. Dr. Enrico Rukzio

Master of Science (M.Sc.) in Computer Science

April 2018 – April 2021

Ulm University, Germany

Title:

SwiVR-Car-Seat: Utilizing a Motorized Swivel Seat to Explore Effects of Vehicle Motion on Interaction Quality in Virtual Reality Automated Driving

Overall Grade: 1.1

(German Grading Scale: 1=Very Good; 2=Good; 3=Satisfactory; 4=Sufficient; 5=Insufficient)

Bachelor of Science (B.Sc.) in Computer Science

Sep 2014 – April 2018

Ulm University, Germany

Prior Experience

Student Research Assistant

Jun 2019 – Feb 2021

Ulm University, Institute of Media Informatics

Head: Prof. Dr. Enrico Rukzio

Supervisors: Dr. Jan Gugenheimer, Dr. Teresa Hirzle, Dr. Tobias Drey

Activities: Ideation & development of a platform for multi-user augmented reality applications,
Ideation & development of eye-tracking applications for augmented reality,
Carrying out literature research, studies, and publication work,
Support of lectures and exercises.

Student Research Assistant

Dec 2018 – Feb 2019

Ulm University, Institute of Communications Engineering

Head: Prof. Dr. Dr. Wolfgang Minker

Supervisors: Dr. Matthias Kraus

Activities: Ideation & development of voice-assistance applications,
Carrying out literature research and publication work.

Teaching (all Ulm University)

- | | |
|--------------------|--|
| Assistant Lecturer | <ul style="list-style-type: none">• Automotive User Interfaces and Interactive Vehicle Applications (Fall 2021, 2022, 2023, 2024)• User Interfaces Software Technologies (Spring 2022, 2023, 2024)• Technical Foundations of Media Development (Spring 2022, 2023, 2024) |
| Course Organizer | <ul style="list-style-type: none">• Research Project in Human–Computer Interaction (Fall 2021 – Spring 2024)• Research Trends in Media Informatics (Fall 2021 – Fall 2023) |

Thesis Supervision (Selection)

- | | |
|------------------|--|
| Bachelor: | <ul style="list-style-type: none">• Hermann Fröhlich (Ulm University and PlanB. GmbH; 2024)• Daniel Hirschle (Ulm University; 2023)• Jonas Schwedler (Ulm University; 2023 ongoing)• Jeremy Gopp (Ulm University; 2023 ongoing)• Julius Schürle (Ulm University; 2023)• Benno Hölz (Ulm University; 2023)• Tim Pfeifer (Ulm University; 2023)• Ulas Kalkan (Ulm University; 2023)• Oliver Schmid (Ulm University; 2022)• Christine Mayer (Ulm University; 2022) |
| Master: | <ul style="list-style-type: none">• Mugdha Keskar (Ulm University; 2024)• Sepide Ansari (Ulm University and Spiegel Institute Mannheim GmbH; 2024 ongoing)• Alexander Häusele (Ulm University; 2023)• Simon Appelt (Ulm University; 2023 ongoing) |

- Vanchha Chandrayan (Ulm University; 2023 ongoing)
- Alexandra Nick (Ulm University and Cerence GmbH; 2023, now PhD Student at Hamburg University of Technology)
- Svenja Kraus (Ulm University; 2023)

Service and Volunteering Activities

- **Associate Chair / Program Committee Member:** CHI Late-Breaking Works (LBW) - CHI '23 '24, AutomotiveUI '24, MuC '24
- **Organizing Committee:** AutomotiveUI 2023
- **Peer Reviewing:** Over 100 peer-reviews completed so far for CHI, MobileHCI, DIS, TEI, ISMAR, ETRA, COGAIN, AutomotiveUI, CHI Play, ICMI, EICS, VRST, IEEE VIS, IMX, C&C, MuC, NordiCHI, ICIS, OzCHI, ISWC, HAI, GLS, ICWSM, TVCG, IMWUT, PacificVis, CSCW, UIST
- **Outstanding Reviewer Recognition:** IMWUT '22, ISS '22, AutomotiveUI '22, DIS '23, IEEE VIS '23, AutomotiveUI '23, **2x** CHI '24, CSCW '24, MuC '24, UIST '24, CHI '25
- **Student Volunteer:** CHI 2023
- Co-Organizer of the **Post-CHI Summer School on Automotive User Interfaces and Future Mobility**

Skills and Competences

- Design, development, and systematic evaluation of interactive systems.
- Utilization and integration of sensor-based hardware, including motion capture and eye gaze tracking technologies.
- Structured design and implementation of experiments and user studies, coupled with user research and statistical analysis.
- Application of both qualitative and quantitative research methodologies.
- Proficiency in graphic illustration, video editing, and various presentation techniques.

Publications – Pascal Jansen

* denotes joint authorship

Full Papers & Journal Articles

1. M. Colley, B. Wanner, M. Rädler, M. Rötzer, J. Frommel, T. Hirzle, P. Jansen and E. Rukzio, **Effects of a Gaze-Based 2D Platform Game on User Enjoyment, Perceived Competence, and Digital Eye Strain**, In Proc. of CHI 2024
2. P. Jansen*, M. Colley*, T. Pfeifer and E. Rukzio, **Visualizing Imperfect Situation Detection and Prediction in Automated Vehicles: Understanding Users' Perceptions via User-Chosen Scenarios**, Elsevier, Transportation Research Part F: Traffic Psychology and Behaviour 2024.
3. A. Zeqiri, P. Jansen, J. O. Rixen, M. Rietzler and E. Rukzio, **'Eco Is Just Marketing': Unraveling Everyday Barriers to the Adoption of Energy-Saving Features in Major Home Appliances**, In Proc. IMWUT 2024
4. M. Colley, J. Czymmek, M. Kücükocak, P. Jansen and E. Rukzio, **PedSUMO: Simulacra of Automated Vehicle-Pedestrian Interaction Using SUMO To Study Large-Scale Effects**, ACM/IEEE International Conference on Human Robot Interaction (HRI) 2024
5. M. Colley*, P. Jansen*, J. J. Matthiesen*, H. Hoberg, C. Reger and I. Thiermann, **How Much Home Office is Ideal? A Multi-Perspective Algorithm**, In Proc. CHIWORK 2023; *Joint First Authors
6. P. Jansen, J. Britten, A. Häusele, T. Segschneider, M. Colley and E. Rukzio, **AutoVis: Enabling Mixed-Immersive Analysis of Automotive User Interface Interaction Studies**, In Proc. of CHI 2023
7. T. Hirzle, F. Fischbach, J. Karlbauer, P. Jansen, J. Gugenheimer, E. Rukzio and A. Bulling, **Understanding, Addressing, and Analysing Digital Eye Strain in Virtual Reality Head-Mounted Displays**, ACM Transactions on Computer-Human Interaction (TOCHI) 2022
8. P. Jansen, M. Colley and E. Rukzio, **A Design Space for Human Sensor and Actuator Focused In-Vehicle Interaction Based on a Systematic Literature Review**, In Proc. IMWUT 2022
9. M. Colley, P. Jansen, E. Rukzio and J. Gugenheimer, **SwiVR-Car-Seat: Exploring Vehicle Motion Effects on Interaction Quality in Virtual Reality Automated Driving Using a Motorized Swivel Seat**, In Proc. IMWUT 2021
10. T. Drey, F. Fischbach, P. Jansen, J. Frommel, M. Rietzler and E. Rukzio, **To Be or Not to Be Stuck, or Is It a Continuum?: A Systematic Literature Review on the Concept of Being Stuck in Games**, In Proc. CHI Play 2021
11. P. Jansen, F. Fischbach, J. Gugenheimer, E. Stemasov, J. Frommel and E. Rukzio, **ShARe: Enabling Co-Located Asymmetric Multi-User Interaction for Augmented Reality Head-Mounted Displays**, In Proc. UIST 2020
12. M. Kraus, F. Fischbach, P. Jansen and W. Minker, **A Comparison of Explicit and Implicit Proactive Dialogue Strategies for Conversational Recommendation**, In Proc. of LREC 2020

Extended Abstracts

1. P. Jansen and F. Fischbach, **The Social Engineer: An Immersive Virtual Reality Educational Game to Raise Social Engineering Awareness**, in Proc. CHI Play EA 2020
2. T. Drey, P. Jansen, F. Fischbach, J. Frommel and E. Rukzio, **Towards Progress Assessment for Adaptive Hints in Educational Virtual Reality Games**, in Proc. CHI EA 2020

Demos

1. P. Jansen, J. Britten, A. Häusele, T. Segschneider, M. Colley and E. Rukzio, **A Demonstration of AutoVis: Enabling Mixed-Immersive Analysis of Automotive User Interface Interaction Studies**, in Proc. AutoUI EA 2023

Theses

1. Pascal Jansen. 2021. ***SwiVR-Car-Seat: Utilizing a Motorized Swivel Seat to Explore Effects of Vehicle Motion on Interaction Quality in Virtual Reality Automated Driving.***
Master Thesis at Human Computer Interaction Group, Ulm University, Germany
2. Pascal Jansen. 2018. ***HoloGami: Comparison of Object Detection Methods in the Context of an Origami Folding Assistant Application for Augmented Reality Glasses.***
Bachelor Thesis at Human Computer Interaction Group, Ulm University, Germany