

Leon Schreiber

Research Assistant (Quality of Experience & Human-Computer Interaction)

Berlin, Germany

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Professional Summary

I am a research assistant specializing in Quality of Experience (QoE), human-computer interaction, and interactive multimedia systems. My work examines how system behavior influences perceptual and cognitive user experience, especially in real-time communication contexts. By combining empirical research experience with a software engineering background, I develop experimental platforms and measurement tools for user studies and am comfortable with qualitative and quantitative approaches. With experience in both development and academic research, including multiple publications and conference awards, I thrive in interdisciplinary environments and bring a passion for creating educational visualization systems that are truly impactful in real-world learning contexts.

Education

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| 2024 - exp. 2026 | Technische Universität Berlin , Berlin, DE
<i>M.Sc. in Computer Science (currently 1.2)</i> |
| 2018 - 2024 | Technische Universität Berlin / Freie Universität Berlin , Berlin, DE
<i>B.Sc. in Media & Computer Science (1.6)</i> |

Professional Experience

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| 03/2024 - Present | Technische Universität Berlin
<i>Research Assistant - Quality of Experience & HCI (part-time)</i>
Research on Quality of Experience in video conferencing and development of experimental software tools. Contributed to all stages of the scientific process, including study design, human-participant experiments, data analysis, scientific writing, and publication/presentation at international conferences. Co-supervised undergraduate students on their bachelor's theses. |
| 04/2022 - 04/2024 | Technische Universität Berlin
<i>Undergraduate Student Researcher (part-time)</i>
Developed custom experimental setups for QoE studies; implemented a controlled-network WebRTC video call platform; conducted data processing and evaluation in Python. |
| 10/2020 - 04/2022 | Technische Universität Berlin
<i>Academic Tutor (part-time)</i>
Led tutorials, assisted students, created teaching and examination materials (e.g. slide decks, lecture videos), and built support tools for course organization. |

Additional Industry Experience

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| 09/2014 - 07/2017 | ROBUR Automation GmbH (now: SPIE Automation GmbH)
<i>Software Developer Apprentice (Fachinformatiker für Anwendungsentwicklung)</i>
Practical foundation in full-stack software development (.NET / C# / WPF); relevant for research prototyping and technical implementation in interdisciplinary environments. |
| 10/2017 - 09/2020 | Omikron Data Quality GmbH
<i>.NET Developer / Working Student</i>
Professional experience in .NET full-stack development and web applications; strengthened software engineering skills for building research prototypes and experiment infrastructure. |

Publications

1. Schreiber, L., Schuh, B., Shchegelskiy, K., Wardah, W., Büyüktas, T. M. K., & Spang, R. P. (2025). **Cognitive Fog under Elevated CO₂: The Influence of Air Quality on Speech Quality Assessment and Response Behaviour** In Proceedings of the 17th International Conference on Quality of Multimedia Experience (QoMEX 2025).
2. Wichers, L., Schreiber, L., Möller, S., & Spang, R. P. (2025). **Gaze in the Machine: The Paradox of Artificial Eye Contact in Video Calls**. In Proceedings of the 17th International Conference on Quality of Multimedia Experience (QoMEX 2025).
3. Spang, R. P., Toom, M., Schreiber, L., & Möller, S. (2025). **Depth Matters: Quality of Experience in Stereoscopic 3D versus Conventional 2D Video Telephony** In Proceedings of the 17th International Conference on Quality of Multimedia Experience (QoMEX 2025).
4. Schreiber, L., Wardah, W., Schmitt, V., Möller, S., & Spang, R. P. (2024). **Improving a Pupillometry Signal Through Video Luminance Modulation**. In Proceedings of the 16th International Conference on Quality of Multimedia Experience (QoMEX 2024).
5. Büyüktas, T. K., Schreiber, L., Shchegelskiy, K., Wardah, W., & Spang, R. P. (2024). **Hear the Echo: A Tool for Real-Time Simulation and Conversation Analysis** (to appear).
6. Büyüktas, T. M. K., Schreiber, L., Spang, R. P., & Möller, S. (2024). **Assessing the Impact of Echo on Conversations in Real-Time Communication Systems** (to appear).

Teaching Experience

2021 - 2022	Study Project Quality & Usability , Technische Universität Berlin Teaching assistant for an undergraduate project course. Supervised student teams across the full project lifecycle, provided technical guidance, and evaluated outcomes and presentations. Co-developed the assessment rubric.
2020 - 2022	Einführung in die Medieninformatik (Introduction to Media & Computer Science) , Technische Universität Berlin Teaching assistant for undergraduate course. Developed programming assignments and grading rubrics, prepared tutorial videos, and held consultation hours.
2020	Rechnerorganisation (Computer Architecture) , Technische Universität Berlin Teaching assistant for undergraduate course. Conducted remote tutorials and graded homework assignments.

Honors & Awards

2025	Best Poster Presentation , 17th International Conference on Quality of Multimedia Experience (QoMEX 2025) Community-voted award for the best poster presentation at the conference for work on CO ₂ effects on speech quality and perceptual assessments.
2024	Best Innovative Idea , 16th International Conference on Quality of Multimedia Experience (QoMEX 2024) Awarded for a novel research concept presented in the paper "Improving a Pupillometry Signal Through Video Luminance Modulation."
2020 - 2022	Deutschlandstipendium , Federal Ministry of Education and Research Merit-based national scholarship awarded for academic excellence and social engagement across three consecutive funding periods.

Language Proficiency

🇩🇪 German: native speaker

🇬🇧 English: full professional proficiency (C1). Multiple years of experience working in English and visiting and presenting at international conferences.

🇪🇸 Spanish: conversational knowledge (B2)

References

Weimar, DE | **Jun.-Prof. Dr.rer.nat. Robert P. Spang**, Bauhaus Universität Weimar
robert.spang@uni-weimar.de
Robert Spang was my mentor during most of my academic journey and is now also supervising my master's thesis.

Berlin, DE | **Prof. Dr.-Ing. Sebastian Möller**, Technische Universität Berlin
sebastian.moeller@tu-berlin.de
Prof. Möller is head of the Quality and Usability lab at TU Berlin, the research group where I conducted all my academic work so far.