

Professional Experience

10/2023 – 01/2024	<p>Research Assistant, Cognitive, computational and systems neuroscience lab, University Leiden <i>Leiden, Netherlands</i></p> <p>Principal Investigator: Dr Anne E. Urai</p> <p>Electrophysiological alignments of single-cell Neuropixels recordings in the mouse brain.</p>
07/2023 – 09/2023	<p>Internship, Lifespan Neural Dynamics Group, Max-Planck Institute <i>Berlin, Germany</i></p> <p>Principal Investigator: Dr Douglas Garrett</p> <p>Quantitative Methods to analyze neural variability in the human brain.</p>
11/2018 – 12/2021	<p>Manager User Experience (UX), Roche Sequencing Solutions <i>Belmont / Santa Clara, CA, USA</i></p> <p>User research, User-Centered Design and Usability Engineering of products for next genome sequencing (NGS) laboratories, pathologists, bioinformaticians, and oncologists.</p> <p>Process Manager Usability Engineering.</p>
11/2015 – 10/2018 08/2014 – 10/2015	<p>Manager User Experience (UX), Roche Diagnostics Senior Usability Engineer, Roche Diagnostics <i>Rotkreuz, Switzerland</i></p> <p>User research, User-Centered Design and Usability Engineering of products for molecular laboratories, clinical chemistry, blood banks, or point-of-care facilities.</p> <p>Process Manager Usability Engineering.</p>
07/2010 – 06/2014	<p>Usability Engineer, Karl Storz GmbH & Co.KG <i>Schaffhausen, Switzerland</i></p> <p>User research, User-Centered Design and Usability Engineering of products for minimally invasive surgery and OR management.</p>
09/2006 – 06/2010	<p>Designer and Usability Engineer, designS & Freelancer <i>Berlin, Germany</i></p> <p>Interfacedesign of webbased tools, interaction design of products in safety-critical context, design of print media.</p> <p>Usability documentation for medical device manufacturers on behalf of BEO MedConsulting Berlin GmbH.</p> <p>Design and Usability Testing on behalf of relevantive GmbH, Berlin.</p>

Education

Since 02/2022

MSc (Research) Psychologie, specialization Cognitive Neuroscience (120 ECTS), University Leiden

Leiden, Netherlands

Thesis: Age differences in response time variability, assessed through a computational model of task-switching.

Supervisor Dr B. Jongkees

02/2016 – 07/2020

BSc Psychology (180 ECTS), Distant-learning University Switzerland

Brig, Switzerland

Thesis: When boredom fails: The impact of state boredom on goal-directed behavior (magna cum laude); Supervisor Dr C. Martarelli.

09/2002 – 01/2006

Industrial Design (Diplom), University Wuppertal

Bergische Universität Wuppertal, Germany

Semester abroad in Koscie, Slovakia (2005)

Thesis: SafIRa – a portable device for non-invasive blood glucose monitoring.

09/1999 – 08/2002

Product Design, Kunsthochschule Kassel

Kassel, Germany

1998

Abitur

Albert-Einstein-Gymnasium Frankenthal, Germany

Teaching Experience & Contributions

2024

Talk: Introduction into electrophysiological alignments using the IBL software GUI.

2023

Teaching Assistant, University Leiden; Course: Introduction to Cognitive Science, BSc Data Science & Artificial Intelligence; Supervision of students and grading of student essays.

2022

Workshop: Pimp your figure – UX essentials for scientific visualizations.

2014 – 2021

Training: UX in medical device development – Usability Engineering Essentials.

Talk: Talking E – The E in Diversity, Equity, and Inclusion; 2021

Workshop: UX in Systems Engineering; Roche Systems Engineering Forum 2019

Training: Data integrity in qualitative methods of usability engineering.

Training: Compliance Trainings Usability Engineering Process.

	<p><i>Training:</i> Usability Testing for medical devices.</p>
2011	<p><i>Article:</i> Hygienezone OP. (design report, issue 2/2011; in German)</p> <p><i>Article & Product Reviews:</i> Diverse contributions to design of medical devices in the online outlet <i>zwomp</i>.</p>

Scientific Contributions & Open Science Material

2024	<p><i>Blogpost</i> CoCoSys Lab: Of mice and (wo)men – or: how I learned to read spikes; Link</p>
2023	<p><i>Poster Präsentation</i> Konferenz Brain & Cognition 2023, Egmond aan Zee, Niederlande: Zang F, Khanal A, Förster S, International Brain Laboratory, Churchland AK, Urai AE. (2023): Age-Related Changes in Neural Noise in a Decision-Making Task</p> <p><i>Blogpost Series:</i> Of mice and men; Link</p> <p><i>Talk:</i> Palliative care for patients with glioblastoma.</p>
2022	<p>Co-Organisor of the local hublet of Neuromatch Conference at Leiden University.</p> <p><i>Paper discussion:</i> Frank et al., 2004, By carrot or by stick: Cognitive reinforcement learning in Parkinsonism.</p> <p><i>NMA group project:</i> Post-error slowing in mice.</p>

Qualifications

UX Methods	<p>User Researcher & Usability Engineer in medical device development</p> <ul style="list-style-type: none"> • Formative and summative Usability Evaluations • Interaction design, Information architecture • Interfacedesign • User flow visualization, Customer / User Journeys • Personas • Co-Creation, Workshop Facilitation • Contextual inquiry, Field observation, Interviews • Task Analysis, Use Error Analysis • Expert Review, Heuristic Analysis, Cognitive Walkthrough
International Standards	<p>IEC 62366-1, Technical Report 62366-2, FDA Guidance: Applying Human Factors and Usability Engineering to Medical Devices, HE75, ISO 14971, IVDR, MDR, GDPR</p>
Processes & Soft Skills	<ul style="list-style-type: none"> • User-Centered Design, Design Thinking, Lean UX • Jobs-to-be-done, Service Design

Certificates & Awards

- UX in Agile, SAFe
- Requirements & Systems Engineering, Project Management, Change Management, Stakeholder Management & Communication
- Introduction to Network Inference and Network Learning in R: Markov random Fields and Bayesian Networks; 2024
- Summer school, Neuromatch Academy (NMA): Computational Neuroscience; 2022
- SAFe 5 Agilist Certificate; 2020
- Project Management – Methods und Instruments; 2015
- Certificate Usability Engineer (25 ECTS), TU Deggendorf: Certified Professional for Usability and User Experience – Foundational Level (CPUX-F); 2013 – 2014
- IREB Certified Professional for Requirements Engineering – Foundation Level; 2012
- Seminar Usability & Requirements, Institut für Informationstechnologien im Gesundheitswesen; 2011
- Certified Business Plan designS through 3CERT GmbH; registration number 800365; 2008
- Winner VDID early career award; 2006

Language skills

- German (Mother tongue)
- Englisch (proficient)
- Dutch (basics)

Software

- Figma, Adobe XD, Miro, Balsamiq
- Jira, Git, Github, Trello, Smartsheet
- R, SPSS, Python

Engagements

Committees & expert associations

- VDID (Verband Deutscher Industriedesigner) e.V.; Member 2006 – 2019; *deputy regional leadership Berlin-Brandenburg till 2010.*
- German UPA; 2008 – 2012
- VDE DGBMT (Deutsche Gesellschaft für Biomedizinische Technik); 2008 – 2021
- VDE DKE 811.4: German Committee for the European standard to apply Usability Engineering to medical devices (IEC 62366); 2009 – 2021
- NVP (Dutch Society for Brain and Cognition); *since 2023*

Voluntary service

- Palliative care / End of life care
- Crisis text line: counselling via text messages
- Diakonie: counselling for young & adolescents (phone, email)
- Neighborhood community service