Jesse Josua Benjamin   Research \ Design

Curriculum Vitae

ImaginationLancaster
Institute for Contemporary Arts   M: hi@jesse-benjamin.com
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Research Experience

Post-Doctoral Research Associate, ImaginationLancaster, Lancaster University
2022 -

Leading applied projects in Dr. Joseph Lindley's AHRC Future
Leaders Fellowship "Design Research Works"
In this role, I have led the conception, coordination, development, design and delivery of the "Ryelands AI Lab", a six-week intensive curriculum intervention collaborating with a local primary school. This included delivery of six lessons on exploring generative AI with students (7-9 years old) in a hands-on approach with custom prototypes, culminating in a student co-designed reimagined school prospectus. The results promise a scalable, impactful approach to familiarising people with generative AI as well as design implications for systems using such technologies, and future deployments with other schools and contexts (e.g., creative industries) are planned.

Expansion of "Entoptic Media" Research and Dissemination
Developed during my PhD research, the "entoptic" (typically referring to visual phenomena such as floaters) design metaphor characterizes how the interplay of material components of systems shapes human experience and has grown into a distinct avenue of research. Importantly, *making* "entoptic media" is key here, with prototypes having been shown at venues such as Dutch Design Week and London Design Festival.

PhD Research, Department of Philosophy, Universiteit Twente
2019 - 2023

As an external PhD student (supervised by Prof. dr. ir. Peter-Paul Verbeek, Prof. dr. Ciano Aydin, and Dr. Michael Nagenborg), I self-directed my research activities for conceptualizing "post-phenomenological AI studies." This allowed me to combine my PhD research with various research associate roles, leading to a synthetic research approach combining Research-through-Design (RtD) and Philosophy of Technology, importantly in a way that makes use of and reflects actual technologies and the depth of the systems within which particular artefacts are embedded.

Research Associate, MCI Research Group, Anhalt University of Applied Sciences
2021 - 2022

In this intermediary role, I was supporting Prof. Dr. Arne Berger through research on participatory design and emerging technologies (IoT, ML, AI, Blockchain), and particularly as co-author on a series of grant proposals (see *Awards* below).

Research Experience *(cont'd)*	**Research Associate, Institute of Computer Science, Freie Universität Berlin** 2017 - 2020

I led on the design, prototype development and qualitative research in the third-party funded project IKON, and was the only non-CS researcher at the Human-Centered Computing group. I conducted semi-structured interviews, participatory data modelling, interface and interaction design, system development and sprint management, and team-wide coordination; as well as tutoring a course and supervising theses.

Teaching Experience*	**Planning, Tutoring and Assessment of "Human-Computer Interaction I" course and supervision of BSc / MSc theses** Freie Universität Berlin (2017-2020)

SUPPORT Post-Graduate Certificate in Higher Education Didactics
Freie Universität Berlin (2019)

Relevant Additional Experience	**Entoptic Media Research Group**

I am leading a growing, informal research group on "Entoptic Media" with international collaborators James Pierce (*University of Washington*), Nick Merrill (*University of California, Berkeley*), Arne Berger (*Anhalt University of Applied Sciences*), Heidi Biggs (*The Pennsylvania State University*), Julija Rukanskaite (*Independent Researcher*), Michael Heidt (*Anhalt University of Applied Sciences*), and Joseph Lindley (*Lancaster University*). Thus far, my work on the entoptic metaphor and the making of Entoptic Media has produced two main avenues for outputs:

- Exhibition of prototypes at *MozFest Manchester*, *London Design Festival* and *Dutch Design Week* (all 2022) and upcoming at *MozFest House Amsterdam* (2023).
- Peer-reviewed research resulting presented at ACM CHI 2021 / 2023

Responsible Artificial Intelligence Licenses (RAIL) Working Group

Since 2022, I have been a member of the Responsible Artificial Intelligence Licensing (RAIL) initiative, and am a co-author of the related IEEE P2840 Standard. Within the initiative, I am also co-lead on Working Group Tooling and Procedural Governance.

SIGs Sustainability / More-than-Human design, ImaginationLancaster

I am a member of the interdisciplinary SIGs Sustainability and More-Than-Human design at ImaginationLancaster. These groups convene researchers across design, policy, architecture and art to plan publications, workshops, and engagement.

*See *Statement of Teaching Goals and Experience* document for details.

Awards

Grants [selected]

Co-Author 'bitplush' grant proposal / BMBF: 1,32m €
Anhalt University of Applied Sciences, 2022

Co-Author 'Landlabor' grant proposal / BMBF: *not granted*
Anhalt University of Applied Sciences, 2021

Co-Author 'WerteRadar' grant proposal / BMBF: 1,58m €
Freie Universität Berlin, 2020

Individual

Santander Master's Scholarship £5,000, 2015, University of Brighton

Education

PhD Philosophy of Technology
University of Twente [2019-2023]

Dissertation:	Machine Horizons — Post-Phenomenological AI Studies
Supervisors:	Prof. dr. ir. Peter-Paul Verbeek, Prof. dr. Ciano Aydin, Dr. Michael Nagenborg
Committee:	Prof. dr. Ron Wakkary, Prof. dr. Tamar Sharon, Prof. dr. Dirk Heylen, Prof. dr. Mieke Boon

Master of Research (MRes) Arts and Cultural Research (Distinction)
University of Brighton [2015-2016]
Supervisors: Prof. dr. Paul Sermon, Dr. Jon Gilhooly

BA Interaction Design (Distinction)
Berliner Technische Kunsthochschule [2013-2015]

Diploma Communication Design (Distinction)
Berliner Technische Kunstschule [2009-2012]

Referees

Prof. dr. ir. Peter-Paul Verbeek   p.p.c.c.verbeek@uva.nl
PhD Promoter. Rector Magnificus, Universiteit van Amsterdam

Prof. dr. James Pierce   jjpierce@uw.edu
Research Collaborator. Assistant Professor, University of Washington

Prof. dr. Arne Berger   arne.berger@hs-anhalt.de
Former Employer. Full Professor, Anhalt University of Applied Sciences

Publications
(*selected*)

Benjamin, Jesse Josua. 2023. 'Gathering Design and its Center(s): Book Review of "Things we could design for More-Than-Human-centered Worlds" by Ron Wakkary, MIT Press'. In Techné: Research in Philosophy and Technology. *Forthcoming*.

Benjamin, Jesse Josua, Heidi Biggs, Arne Berger, Julija Rukanskaitė, Michael B. Heidt, Nick Merrill, James Pierce, and Joseph Lindley. 2023. 'The Entoptic Field Camera as Metaphor-Driven Research-through-Design with AI Technologies'. In *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems*, 1–19. CHI '23. New York, NY, USA: Association for Computing Machinery. https://doi.org/10.1145/3544548.3581175.

Berger, Arne, Albrecht Kurze, Andreas Bischof, **Jesse Josua Benjamin**, Richmond Y. Wong, and Nick Merrill. 2023. 'Accidentally Evil: On Questionable Values in Smart Home Co-Design'. In *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems*, 1–14. CHI '23. New York, NY, USA: Association for Computing Machinery. https://doi.org/10.1145/3544548.3581504.

Lee-Smith, Matthew L., **Jesse Josua Benjamin**, Audrey Desjardins, et al. 2023. 'Data as a Material for Design: Alternative Narratives, Divergent Pathways, and Future Directions'. In *Extended Abstracts of the 2023 CHI Conference on Human Factors in Computing Systems*, 1–5.. New York, NY, USA: Association for Computing Machinery. https://doi.org/10.1145/3544549.3573817.

Green, David Philip, Joseph Lindley, Enrique Encinas, Mayane Dore, **Jesse Josua Benjamin**, and Spyros Bofylatos. 2023. 'Ways of Seeing Design Research: A Polyphonic Speculation'. *Nordes Conference Series*, June. https://doi.org/10.21606/nordes.2023.96

Benjamin, Jesse Josua. 2023. 'Machine Horizons: Post-Phenomenological AI Studies'. Doctoral dissertation, University of Twente. https://bit.ly/3MBQ0cg.

Benjamin, Jesse Josua, Christoph Kinkeldey, Claudia Müller-Birn, Tim Korjakow, and Eva-Maria Herbst. 2022. 'Explanation Strategies as an Empirical-Analytical Lens for Socio-Technical Contextualization of Machine Learning Interpretability'. *Proceedings of the ACM on Human-Computer Interaction 6 (GROUP)*: 39:1-39:25. https://doi.org/10.1145/3492858.

Benjamin, Jesse Josua, Arne Berger, Nick Merrill, and James Pierce. 2021. 'Machine Learning Uncertainty as a Design Material: A Post-Phenomenological Inquiry'. In *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems*, 1–14. CHI '21. New York, NY, USA: Association for Computing Machinery. https://doi.org/10.1145/3411764.3445481.

Kinkeldey, Christoph, Tim Korjakow, and **Jesse Josua Benjamin**. 2019. 'Towards Supporting Interpretability of Clustering Results with Uncertainty Visualization'. In *Eurographics Proceedings 2019*. The Eurographics Association. https://doi.org/10.2312/trvis.20191183.