Letter of intent

File number 175.2021.034
Grant 2021/2022

Applicant

Title Dutch Design Data Hub

Abstract

The Dutch Design Data Hub (DDDH) is a collaborative effort of the major Dutch centres of industrial design research (TU Delft, TU Eindhoven, U. of Twente) with the aim to establish a large-scale scientific infrastructure to enable transformative research on the intersection of Industrial Design and Artificial Intelligence (AI).

Dutch centres of design research and culture possess a vast repository of data about design artifacts and design processes, most of which has never been analysed before. Combining these repositories into a unified data hub will create a unique multi-lingual, multimedia corpus of design which provides unprecedented research opportunities for 1) data-driven analysis of design processes and practices and 2) development of AI-enabled design tools and methods. At present, no similar research corpus exists anywhere in the world.

The impact of the DDDH is the development of a collaborative community of researchers from the fields of industrial design and artificial intelligence, jointly addressing research questions such as: How can AI methods and computational analytics contribute to a richer understanding of Dutch design culture, history and identity? How can AI methods contribute to a richer understanding of design processes and design practices? How can AI-based design tools and methods support creativity, reasoning and decision making in design?

The DDDH will strengthen the position of the Netherlands as a leading centre for design and AI research and underscore the unique cultural position of Dutch design. The research enabled by the DDDH will foster creativity and innovation and empower the creative design sector to effectively address critical societal challenges.

NWO domains:
Social Sciences and Humanities (SSH), Applied and Engineering Sciences (AES), Science (ENW)

Research fields:
- 00.00.00 Industrial Design
- 27.60.00 Cultural history
- 34.45.00 History of technology
- 37.40.00 Databases for humanities
- 16.60.00 Artificial intelligence, expert systems
- 16.90.00 Computer science, other

Researchers:
The lead group of researchers combines expertise from industrial design, design history, design engineering, computer science and artificial intelligence.
- Gerd Kortuem, Professor Internet of Things, TUD
- Bregje van Eekelen, Professor Design, Culture and Society, TUD
- Berry Eggen, Professor Design for User Experience, TUE
- Mathias Funk, Associate Professor Data-enabled Design, TUE
- Ian Gibson, Professor Design Engineering, Twente
- Alessandro Bozzone, Professor Human-Centered AI, TUD
- Conny Bakker, Professor Design for Sustainability, TUD
- Catholijn Jonker, Professor Interactive Intelligence, TUD
- Liesbeth Noordegraaf-Eelens, Professor Transformative Academic Education, Erasmus University
- Ben Wubs, Professor International Business History, Erasmus University
- Brigitte Jansen, Netwerk Archieven Design en Digitale Cultuur, Het Nieuwe Instituut
- Robin van den Akker, Erasmus University College
- Roger Teeuwen, Willem de Kooning

Alignment with LSRI Roadmap:
DDDH aligns with the Social Sciences & Humanities group and responds to research questions on the nature and change of cultural identity, the role of tangible cultural heritage, the social histories of (design) science and the impact and
opportunities of digital technologies. In addition, the DDDH is closely aligned with the Nieuwe Nationale Strategie Digitaal Erfgoed 2021-2024, and strives to become a CLARIAH-certified data hub.

Organisation responsible for the application
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Confirm letter of intent
With submitting this form via ISAAC I declare to have filled in this form completely and truthfully.

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