School of Design and Creative Arts

Research Associate in Design Practice Research for the project “When Design Never Ends”
REQ220147

As part of the University’s ongoing commitment to redeployment, please note that this vacancy may be withdrawn at any stage of the recruitment process if a suitable redeployee is identified.

The School of Design and Creative Arts (SDCA) is an internationally renowned school. The School has a strong, internationally recognised research community. We discover and develop new concepts and ideas in areas related to art, design, digital fabrication, ergonomics and human factors. Annually we attract over £4 million in funding from external investors and businesses. This funding helps us undertake a number of research projects which aim to have a real impact on the world around us.

Project Description

When Design Never Ends: emergent product design practices in the era of Additive Manufacturing [WDNE] is a two-year project funded by the Arts and Humanities Research Council (AHRC) [grant number AH/V009214/1].

The aim of the WDNE project is to provide a robust conceptual framework for understanding the impact of AM in product design practice; building a systematic methodology for studying the evolution of design practice; and presenting a new perspective through a comparative analysis of design practices across different domains and sectors. The project runs from 1st March 2022 to 29th February 2024.

Additive Manufacturing (AM), also known as 3D Printing, is a family of manufacturing technologies that builds physical artefacts by adding material layer by layer. Unlike manufacturing processes such as folding, milling, moulding or casting, AM can make shapes that would be impossible or at least very difficult with traditional methods. AM capabilities are transformative for product design in many ways, but especially because they remove the traditional barriers of upfront investment in tooling that mark the end of the design process and the start of production. This can allow professional designers to change their designs continually without a clear end to the design process nor a final design.

As in craftsmanship or software development, each iteration of the product can become a new improved version of the previous. So, the sequential structure of product versions can disappear and be replaced by a continuous design flow of potentially unique or personalised products with new, improved or simply different functions or aesthetics. This can bring great opportunities but also many questions and challenges. For instance, how would the quality or regulatory compliance of a product be assured? How much time or effort should be invested in the design of each iteration? How would brand identity be maintained? How would the design process be managed? Would product designers have more or less work? What new knowledge and skills would be required?
The objective of this project is to uncover cutting-edge design practices in AM and study empirically how product design is evolving; thus, defining the implications of AM for the future of the discipline.

The Research Associate will report to the project’s Principal Investigator, Dr Patrick Pradel at Loughborough University, and work alongside the Co-Investigator Prof Richard Bibb and a team of industrial partners.

**Job Description**

**Job Grade:** Specialist and Supporting Academic Grade 6

The Research Associate will be responsible for conducting research in the area of industrial and product design practice and be responsible for the development of a research framework for investigating industrial and product design practices, undertaking primary data collection and data analysis.

**Job Duties**

- Work with the PI to develop a design research methodology framework for investigating the impact of emerging technologies in product and industrial design practice.
- To become familiar with the literature on product and industrial design practice, emerging technologies impact and design research methodologies (in particular grounded theory and case study research).
- To develop and conduct research and analyse the data.
- To develop a virtual exhibition based on the collected data and findings.
- Be responsible for conducting the day to day running of the project including scheduling and organising meetings and keeping records, ensuring milestones are met and deadlines are adhered to.
- To formulate detailed plans for the project based on broad guidance from the project team.
- To feedback to the project team on progress, to make recommendations for next steps.
- Write up regular progress reports and present outcomes to Investigators and Collaborators.
- Travel to attend meetings, conduct data collection and make presentations both within the project partners working group and to external stakeholders.
- To support the project team by enhancing relationships with existing collaborators and by assisting in the establishment of relationships with new collaborators.
- To write research papers suitable for publication in high-quality academic journals.
- To attend and contribute to conferences.
- To contribute to project promotion and public engagement events including updating website and social media.
- Contribute ideas for new research and enterprise directions.
- Maintain confidentiality at all times and ensure that data and intellectual property (IPR) policies and agreements are not violated.
- To work within allocated budgets and maintain financial records.
- Engage in training programmes in the University (or elsewhere) that are consistent with the needs and aspirations of the project and those of the School.
- Undertake other duties as may be reasonably requested and that are commensurate with the nature and grade of the post.

**Points To Note**

The purpose of this job description is to indicate the general level of duties and responsibilities of the post. The detailed duties may vary from time to time without changing the general character or level of responsibility entailed.

**Special Conditions**
All staff have a statutory responsibility to take reasonable care of themselves, others and the environment and to prevent harm by their acts or omissions. All staff are therefore required to adhere to the University’s Health, Safety and Environmental Policy & Procedures.

All staff should hold a duty and commitment to observing the University’s Equality & Diversity policy and procedures at all times. Duties must be carried out in accordance with relevant Equality & Diversity legislation and University policies/procedures.

Successful completion of probation will be dependent on attendance at the University’s mandatory courses which include Respecting Diversity and, where appropriate, Recruitment and Selection.

**Organisational Responsibility**

Reports to the Principal Investigator, Dr Patrick Pradel p.pradel@lboro.ac.uk
Person Specification

Your application will be reviewed with respect to meeting the essential and desirable criteria listed below. Applicants are strongly advised to explicitly state and evidence how they meet each of the essential (and desirable) criteria in their application. The stages of assessment are as follows:

1 – Application
2 – Test/Assessment Centre/Presentation
3 – Interview

### Essential Criteria

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<th>Area</th>
<th>Criteria</th>
<th>Stage</th>
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<tr>
<td>Experience</td>
<td>Background in Industrial Design, Product Design or related field</td>
<td>1,2,3</td>
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<td></td>
<td>Experience in planning, conducting and evaluating design research projects</td>
<td>1,2,3</td>
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<td>Authoring original work for academic journal papers, conference papers or technical reports</td>
<td>1</td>
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<td>Skills and abilities</td>
<td>Ability to undertake the duties and responsibilities of the post</td>
<td>1,3</td>
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<td>Ability to analyse and synthesize qualitative data</td>
<td>1,2,3</td>
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<td>Excellent written and oral communication skills</td>
<td>2,3</td>
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<td>Self-motivated with the ability to meet deadlines</td>
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<td>Excellent interpersonal, communication and organisational skills</td>
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<td>Working knowledge of research methods including qualitative data analysis and associated software, for example NVivo</td>
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<td>Working knowledge of software packages for online surveys, for example Survey Monkey</td>
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<td>Ability to write project reports and make technical presentations to industrial and academic research groups</td>
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<td>Knowledge of relevant Health &amp; Safety issues</td>
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<td>Training</td>
<td>Demonstrate evidence of having undertaken further training</td>
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<td>Qualifications</td>
<td>PhD (or near completion)</td>
<td>1</td>
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<td>Other</td>
<td>Commitment to observing the University’s Equal Opportunities policy at all times.</td>
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### Desirable Criteria

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<tr>
<td>Experience</td>
<td>Experience in grounded theory research</td>
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<td>Experience in design practice research and investigating design practitioners</td>
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<td>Experience in case study research</td>
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<td>Experience in online surveys</td>
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<td>Experience in developing research methodologies</td>
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<td>Experience in developing physical and virtual exhibitions</td>
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Developing proposals for funding from external agencies 1

Working in a high-quality academic research environment 1

Skills and abilities Published original work, in the highest quality refereed academic journals 1

Conditions of Service

The position is FULL TIME and FIXED TERM up to 12 months. Salary will be on Specialist and Supporting Academic Grade 6, at a starting salary to be confirmed on offer of appointment. The appointment will be subject to the University’s Terms and Conditions of Employment for STAFF GRADES 6 AND ABOVE, details of which can be found here.

The University is committed to enabling staff to maintain a healthy work-home balance and has a number of family-friendly policies which can be found here.

The University offers a wide range of employee benefits which can be found here.

We also offer an on-campus nursery with subsidised places, subsidised places at local holiday clubs and a childcare voucher scheme (further details are available at: http://www.lboro.ac.uk/services/hr/a-z/childcare-information---page.html)

Consideration can be given to applications requesting PART-TIME WORKING, please indicate this in the Supporting Information.

In addition, the University is supportive, wherever possible, of flexible working arrangements. We also strive to create a culture that supports equality and celebrates diversity throughout the campus. The University holds a Bronze Athena SWAN award which recognises the importance of support for women at all stages of their academic career. For further information on Athena SWAN see http://www.lboro.ac.uk/services/hr/athena-swans/

Applications

The closing date for receipt of applications 18th March 2022. Interviews will be held on 05th and 07th April 2022.