# Position Description

## Group of research topics: Interactive materials

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| **Position is funded by** | - COFUND, Marie Skłodowska-Curie Actions (MSCA), Horizon 2020, European Union<br>- Eindhoven Universtiy of Technology (TU/e), Netherlands<br>- RMIT University (RMIT), Australia |
| **Research Host** | Eindhoven Universtiy of Technology (TU/e), Netherlands |
| **PhD awarding institution/s:** | Dual PhD awarded by TU/e and RMIT |
| **Locations** | - Primary: Eindhoven, Netherlands<br>- Secondary: Melbourne, Australia<br>- Annual workshops in Barcelona, Spain |
| **Contract** | Full time, fixed term (36 months) |
| **Gross annual salary** | 34.076 EUR (gross amount before employee's taxes and contributions) (+ holiday and end of year allowance) |
| **Preferred start date** | 01/09/2022 (tentative) |
| **Deadline for applications** | 30/04/2022 (Reference: TU/e-DC2) |

## Your choice of research topics (only one of these projects will be funded):

| Project 1: Interactive Materials for Society | Project 2: A Design Framework for Interactive Materials | Project 3: Evaluation frameworks for Interactive Materials |
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| Through a design research approach this project explores how Interactive Materials enable new user interaction as they enrich users senses (changing colors or shape). Combining data-driven design processes and visualizing societal related information to different stakeholders is key of this design led technical PhD topic. With case studies from Philips Design from the domain of health care the goal is to investigate how to show societal relevant information (eg successfully treated patients in the city) in interactive material based design solutions.<br>Your goal in the PhD is to contribute to Design as a discipline and to be educated as a Designer.<br>*Further information may be obtained from the Supervisors.* | Goal of this PhD is to develop a design framework for interactive materials and how to enhance user experience with such approaches in medical settings (Philips Design). A series of design solutions will be used to validate the framework to contribute to the general understanding of how to design for multi-stakeholder user experiences with interactive materials.<br>Your goal in the PhD is to contribute to Design as a discipline and to be educated as a Designer<br>*Further information may be obtained from the Supervisors.* | Interactive Material will be deployed in the next generation of multi-stakeholder software solutions to contribute to a societal change. How such solutions that are designed for society in general can be evaluated in terms of user experience is still unclear. Goal of this PhD is to set first steps in the development of a design based evaluation framework of interactive materials, building on recent understanding how such solutions (e.g. Covid-19 apps) have failed to support society to tackle problems.<br>Your goal in the PhD is to contribute to Design as a discipline and to be educated as a Designer<br>*Further information may be obtained from the Supervisors.* |

| **Supervisors:** Full Prof. Regina Bernhaupt (TU/e) **and** Prof. Laurene Vaughan (RMIT) | |
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| **Research Fields:** Industrial design, Sustainability, Data science and Digital design | **Research Fields:** Industrial design, Sustainability, Digital design, Psychology and Data science |

## REDI

The REDI (RMIT European Doctoral Innovators) program is a unique opportunity offering excellent PhD conditions including enviable international experience, top-class research discipline and transversal skills training as well as networking with academic and industry leaders across 60+ supporting partners and 12 countries.

As a REDI researcher you will be:

- enrolled by two entities, with the chance to be awarded dual doctorates and gain alumni status from multiple institutions, including the Marie Curie Alumni Association.
- seeing the world and spending a year at RMIT University in Melbourne, Australia (ranked in the top 20 of universities under 50 years old in the world).
- part of a rich multidisciplinary network of researchers and supervisors who come together in annual, week-long training events in Barcelona.
- working closely with industry and gaining experience with the 40+ leading companies supporting the program.
- earning a salary above national standards for doctoral positions with full social security benefits (with further support available for eligible researchers with additional needs).
- receiving support and guidance from two highest-calibre, experienced supervisors with high PhD completion rates.
- enhancing your career prospects through comprehensive technical and transversal skills training from leading institutions, intersectoral and international experience and mentoring.
- working on innovative and exciting projects of high commercial and societal value with up to four years to complete your research.

**For more information visit: rediprogram.eu**

## Are you REDI? (Expected Profile)

### Project 1

**Your background and skills**: You should have a solid background in Human-Computer Interaction with a strong affinity towards technology and programming; programming skills at least in one language e.g. Java, C; and a good basis is data analytics and statistics. Likewise, good communication skills in English, both in speaking and in writing are required.

**Your work experience**: Professional experience is not required.

**Your research experience**: Experience in research and a publication record will be considered advantageous.

### Project 2

**Your background and skills**: You should have a solid background in Design or Interaction Design or Multimedia Design and a good basis in user-centered design methods and approaches. Likewise, good communication skills in English, both in speaking and in writing are required.

**Your work experience**: Professional experience is not required.

**Your research experience**: Experience in research and a publication record will be considered advantageous.

**Project 3**

**Your background and skills**: You should have a solid background in Design, HCI or Computer Science; a strong interest in methods and their development; and a good basis in data analytics and statistics. Likewise, good communication skills in English, both in speaking and in writing are required.

**Your work experience**: Professional experience is not required.

**Your research experience**: Experience in research and a publication record will be considered advantageous.

## Employment Benefits and Conditions

TU/e offers a 36-month full-time work contract (extendable up to 48 months in duly justified cases), indicatively starting on 1st September 2022. The position will be based in Eindhoven (Netherlands). International travel is foreseen, including to Australia (up to 12 months) and Spain (one week per year). There is a probation period of nine (9) months and there are 40 working hours per week.

The remuneration, in line with the European Commission rules for Marie Skłodowska-Curie grant holders, will consist of a gross annual starting salary of 34.076 EUR (gross amount before employee's taxes and contributions) (+ holiday and end of year allowance) resulting in est. €2.434 EUR gross per month. The net salary* to be perceived by the researcher is estimated at €1.964 EUR net per month. However, the definite amount to be received by the Researcher is subject to national tax legislation. For more information on the estimated monthly net salary, use the net salary calculator.

*Net salaries can fluctuate in accordance with an individual's personal circumstances (marital status, age, disability, family and dependents, etc. The above indicative net salaries offer an approximation of what a single person in their early 20s could expect to receive in their bank account after taxes.*

**Benefits include**:

- A yearly holiday allowance of 8% of the yearly salary.
- A yearly end year allowance of 8.3% of the yearly salary.
- A broad package of fringe benefits (including an excellent technical infrastructure, moving expenses, savings schemes and excellent sports facilities).
- 1,000€ yearly travel allowance to cover flights and accommodation to participate in the annual workshop at RMIT Europe in Barcelona (Spain).
- 10,000€ allowance to cover flights and living expenses for up to 12 months in Australia.

For more details, please see:
https://assets.tue.nl/fileadmin/content/universiteit/diensten/daz/Bureau_PenP/Regulations%202021.pdf

## REDI to apply? First a little more about us…

### TU/e

The department of Industrial Design is one of the nine departments of the Eindhoven University of Technology (TU/e). The Systemic Change cluster with Industrial Design focuses on designing innovations that have impact on systemic structures and groups of people, ultimately aiming to address large-scale issues such as urban health, future mobility and sustainability.

TU/e university offers to its Doctoral Students a wide range of benefits, including:
- **Mentoring program:** Doctoral Candidates will have a daily supervisor and an assigned buddy (PhD student). Likewise, Candidates are eligible for coaching and mentoring within the TU/e system.
- **Courses and training opportunities:** TU/e offers a doctoral degree training program: https://intranet.tue.nl/en/university/services/human-resources-management/human-resource-management/professional-development/proof-training-program/

- **Language courses:** TU/e provides languages courses to its students: https://intranet.tue.nl/en/university/services/education-and-student-affairs/tue-language-center/language-courses/
- **Cultural and social activities:** TU/e has a central program for social activities for new employees (every PhD student is treated as an employee).
- **Engagement with industry:** the Doctoral Student will closely work with our industry partner, Philips Design. Philips Design will support the Doctoral Student with a selection of case-studies to work on.

For more information, visit: https://www.tue.nl/en/

## RMIT

RMIT is a global university of technology, design and enterprise, ranked in the top 20 of universities under 50 years old in the world. World-class people, leading edge resources, collaboration with industry partners and multi-disciplinary approaches are just a few of the trademarks of research at RMIT, which boasts almost 90,000 students and campuses in Australia, Vietnam, a centre in Barcelona, Spain and research and industry partners on every continent.

As Doctoral Student at RMIT you will be able to benefit from a wide range of training and mentoring opportunities including:
- **The PhD Up** program offering a huge range of workshops, seminars and short courses to build research knowledge and skills, including research writing, publishing, research methods, ethics, project management and careers (see more at: https://www.rmit.edu.au/students/student-essentials/information-for/research-candidates/enriching-your-candidature/phd-up-program)
- **RMIT PhD Online Modules**, designed specifically for PhD students, including *Researching your literature review, Writing a research proposal, Choosing where to publish, Writing for Publication, Research Integrity*, etc.
- **RMIT Creds**, RMIT's Digital Credentials Platform, which includes over 80 credentials covering a wide range of topics such as *Understanding Responsible Research and Innovation, Academic Integrity Awareness, Emotional Intelligence, Diversity Matters, Agile Ways of Working, Why Gender Matters, Cross Cultural Communications*, etc. (see more at: https://www.rmit.edu.au/study-with-us/levels-of-study/short-courses);
- **The e-Grad School**, the online learning modules of the Australian Technology Network (ATN) of Universities' covering a multitude of transferrable skills such as *Critical and Creative Thinking, Leadership and Communication, Entrepreneurship, Research Commercialisation, Public Policy*, etc.
- **The RMIT Mentoring platform also** gives you access to mentoring from trained professionals and experts, including:
    o *Career Mentoring* - career guidance from industry professionals from all disciplines and global locations.
    o *Women@RMIT Mentoring* - career guidance from industry professionals who are committed to gender diversity and equality in the workplace (especially for female students in male dominated industries)
    o *Pride Mentoring* - a chance for students who identify as LGBTIQ+ to receive professional and social guidance from industry professionals who also identify as LGBTIQ+ or are familiar with the additional challenges these groups face in the workforce.

Find out more: rmit.edu.au

## A little more about you…

## Eligibility
**You need to fulfil criteria of the REDI program and both universities to be recruited.**

To apply for REDI, you must comply with the MSCA-COFUND eligibility criteria by the application deadline:

- **Be in the first four years Full-Time Equivalent (FTE) research experience** of your research career and not yet have been awarded a doctoral degree. FTE Research Experience is measured from the date when a researcher obtained the degree entitling him/her to embark on a doctorate, **AND**

- **Not have resided or carried out your main activity (work, studies, etc.)** in the country of your research host for more than 12 months in the 3 years immediately before this call's deadline. Time spent as part of a procedure for obtaining refugee status under the Geneva Convention (1951 Refugee Convention and 1967 Protocol), compulsory national service and/or short stays such as holidays is not taken into account.

**AND** the following criteria:

- **Hold a bachelor's degree requiring at least 4 years of full-time study** in a relevant discipline awarded with honours and including a research component; **OR**

- **Hold a master's degree that includes a research component** or a master degree without a research component with at least a high distinction average; **OR**

- **Have evidence of appropriate academic qualifications and/or professional experience** demonstrating that the applicant has developed knowledge of the field of study or cognate field and the potential for research sufficient to undertake the chosen project.

  **AND**

- Have **English level C1 language proficiency**.

In addition to the above, if your application is successful, you will be required to:
- Depending on your personal situation you might have to apply for a working visa in the Netherlands (More information https://www.government.nl/topics/foreign-nationals-working-in-the-netherlands/question-and-answer/what-permits-do-foreign-workers-need)
- Apply for a student visa in Australia (More information: https://www.rmit.edu.au/study-with-us/international-students/apply-to-rmit-international-students/student-visas/apply-for-a-visa)

## In addition to meeting the eligibility criteria for the REDI Program, you will also need to meet the admission criteria of both institutions:

## Admission at TU/e

You will be enrolled as Doctoral Student at TU/e for the entire duration of the assignment. At admission, you will need to supply:

- Degree certificate and the transcript of records of a master's degree. Formal requirements for validating or accepting qualifications obtained abroad might variety depending on country of citizenship / origin.
- Candidates should have a C1 level of English according to the European Framework of Reference for Languages (CEFR).

More information:
https://assets.tue.nl/fileadmin/content/universiteit/diensten/daz/Bureau_PenP/Regulations%202021.pdf

## Admission at RMIT
You will also be enrolled as Doctoral Student at RMIT for the entire duration of the assignment. At admission, you will need to supply:
- CV
- Complete transcripts for all academic qualifications
- Research proposal or statement of interest in an available research project
- Language certificates
- List of referees

More information: https://www.rmit.edu.au/research/research-degrees/how-to-apply

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