



The neural basis of design ideation

An fMRI study with the Designapse research project

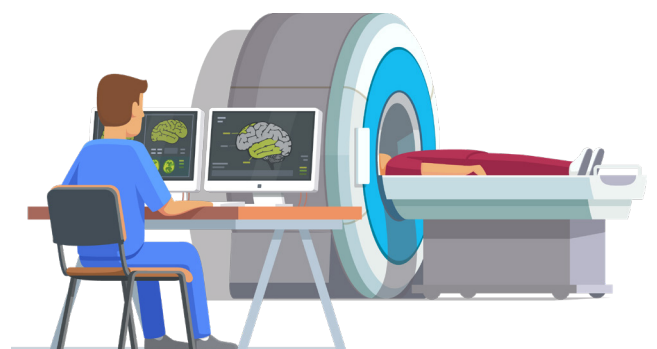
Who we are and what we do

We are a multidisciplinary team of researchers whose research focuses on integrating imagination, neuroscience, and technology to support effortless generation and development of creative ideas throughout the design process. We are at the forefront of international research on the cognitive and neural basis of design. In 2018 we completed the worlds first fMRI study of professional product design engineers and now we're recruiting for our second experiment.

Recruiting product design engineers for an fMRI study of design ideation

In our last fMRI study we examined the brain regions involved in design ideation and mental imagery processing. Now we want to explore how different regions of the brain interact during concept generation. To do this, we need your help.

- We're seeking product design engineers with 2 years professional experience
- You will carry out concept generation and problem solving tasks in an MRI scanner in Edinburgh
- We will pay you for your time and give you a copy of your brain scan that you can turn into a 3d model!



Participation

We are currently recruiting practicing designers for paid participation in an fMRI study on creative design ideation.

To be eligible for the study, you should hold an undergraduate degree in product design engineering, or another product design/engineering-focused area. You must also have at least 2 years of professional experience as a practicing product design engineer. Product design engineers are designers who:

- apply both creative and analytical thought processes during design; and
- have a general understanding of the design process that encompasses technical aspects, aesthetics, ergonomics, materials, manufacturing, marketing, and commercial aspects.

The study consists of a pre-screening session at a convenient location (~45 minutes), followed on a later date by an fMRI scanning session at the Clinical Research Imaging Centre in Edinburgh (~1.5 hours) and a sketching activity (self-paced, aprx. 1-2 hours). During the fMRI scan, your brain activity will be recorded while you perform a series of short design and problem solving tasks.

Participants will be reimbursed £30 per hour up to a maximum of 8 hours, plus travel expenses. You will also be provided with a copy of your brain imaging data, which can be viewed and prepared for 3D printing using freely-available software - speak to one of our researchers for more information.

Your participation would make a significant contribution to our work and ultimately, towards understanding the cognitive and neural basis of design. To participate in this pioneering research, please get in touch via the contact details provided to the right.

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Contact details

For more information on Imagined and our current project, Designapse, visit our website:

www.imagine-d.uk

To discuss the project further, or to arrange a date and time for participation in one of our studies, please contact one of our researchers:

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The Department of Design, Manufacture and Engineering Management

The Department of Design, Manufacture and Engineering Management (DMEM) is an energetic and innovative department whose aim is broad-based education and research of relevance to meet industrial and commercial needs. We are concerned with making organisations perform better through product, process, and business development.

Our focus is on 'Delivering Total Engineering' through research excellence, effective industrial collaboration, and innovative engineering education.

The School of Psychological Sciences and Health

The School of Psychological Sciences and Health is a vibrant and multi-disciplinary school, covering the areas of Psychology, Physical Activity for Health, and Speech & Language Therapy. Our teaching and research is supported by excellent facilities, including body composition, driving simulator, human performance, oculomotor, psychophysiology, and speech & language labs. We conduct impactful and theoretically-driven research spanning the themes of Health, Children & Young People, and Cognition.