### PhD Topic title

Human augmentation through Artificial Intelligence (AI)

Has this topic been previously published on our website but is now archived? If so, please let us know so we can review and unarchive the page if necessary No

Expiration date: day, month, year

Long-term

### PhD Topic description/details

With the rapid advancements in AI, human augmentation has moved from science fiction to real-world applications, providing solutions that empower individuals in their daily lives, workplaces, and critical decision-making contexts. As AI systems evolve from tools to collaborative partners, there is now a need for solutions that support and amplify human capabilities rather than replace them by acting as cognitive. emotional, and physical partners - helping users make better decisions, improve skills, and even overcome physical disabilities. However, the rapid growth of Al raises critical questions about reliability, safety and trustworthiness. Ensuring that Al systems are responsive to diverse user needs is therefore crucial for achieving meaningful human-centred augmentation, whilst respecting human autonomy and maintaining trust. This research aims to explore these intersections between technology and humans, advancing the design and development of human-centred All applications that act as collaborative partners, providing personalised, intuitive support in real-world diverse domains, such as healthcare, education, social support, creative industries, and many more. By designing AI systems that adapt to user needs, explain their processes, and build trust, PhD candidates will contribute to Al technologies that ultimately augment human capacity.

We invite research proposals in the above research area. This is a unique opportunity to contribute to pioneering research at the forefront of AI and human-centred design. For informal enquiries about the research, please email fotios.spyridonis@brunel.ac.uk.

# Supervisor(s)

Dr Fotios Spyridonis and Prof Yongmin Li <a href="https://www.brunel.ac.uk/people/fotios-spyridonis">https://www.brunel.ac.uk/people/yongmin-li</a>

### Subject(s) - here you can find the list of subject areas:

Computer Science
Design
Multimedia
Human-Computer Interaction

## Research Centre(s)

NA

### Challenge area(s)

- Communities
- Digital
- Health
- Manufacturing
- Sustainability

### Research Group(s)

Intelligent Data Analysis Human Computer Interaction

### **Funding**

Self-funded.

Brunel offers a number of funding options to research students that help cover the cost of their tuition fees, contribute to living expenses or both. See more information <a href="https://hee.com/here">here</a> The UK Government is also offering Doctoral Student Loans for eligible students, and there is some funding available through the Research Councils. Many of our international students benefit from funding provided by their governments or employers. Brunel alumni enjoy tuition fee discounts of 15%.

#### How to apply

If you are interested in applying for the above PhD topic please follow the steps below:

- Contact the supervisor by email or phone to discuss your interest and find out
  if you would be suitable. Supervisor details can be found on this topic page.
  The supervisor will guide you in developing the topic-specific research
  proposal, which will form part of your application.
- Click on the 'Apply here' button on this page and you will be taken to the relevant PhD course page, where you can apply using an online application.
- Complete the online application indicating your selected supervisor and include the research proposal for the topic you have selected.