PhD Topic title

UX/UI Design with Interactive and Generative 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

User experience/interface (UX/UI) design is a complex and time-intensive process that traditionally relies on highly skilled professionals to create intuitive, engaging, and effective solutions. This labour-intensive and time-consuming process can be a bottleneck in product development cycles. The emergence of artificial intelligence (AI), particularly interactive AI and generative AI, can significantly accelerate design workflows by automating repetitive tasks, generating design variations, providing data-driven insights, and enabling a wider range of users to engage in the design process. This project aims to explore how AI can augment human designers' capabilities in the above-mentioned area of UX/UI design. You may focus on one or more of the following key aspects: (1) new Al models or frameworks to create unique design elements, patterns, and illustrations, (2) generative user interfaces (genUI) for personalised individual experiences, (3) automated or Al-assisted user persona and profile generation, (4) transforming from low fidelity to mid and high fidelity prototypes, (5) Al-assisted user insight analysis for both user requirement identification and design evaluation, (6) Al-enhanced accessibility design and/or assessment, to name a few.

The successful candidate will work in the Department of Computer Science at Brunel University London and will be supervised by Prof Yongmin Li and Dr Fotios Spyridonis, who are specialised in Artificial Intelligence and Human Computer Interaction.

For informal enquiries about the research, please email yongmin.li@brunel.ac.uk.

Supervisor(s)

Prof Yongmin Li and Dr Fotios Spyridonis https://www.brunel.ac.uk/people/fotios-spyridonis

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

Computer Science Design Digital media Games design

Research Centre(s)

N/A

Challenge area(s)

- Communities
- Digital
- Health
- Manufacturing
- Sustainability

Research Group(s)

Intelligent Data Analysis
Human Computer Interaction

Doctoral Training Programmes or indicate 'not applicable' N/A

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 here 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.