

UCL EPSRC Landscape Award (UELA) Studentship in The Bartlett School of Architecture

Project: Equitable movement and navigation modelling ([2531ac1460](#))

Applications close at 13:00 GMT on 28 January 2025

Overview

This PhD project will advance and diversify our understanding of how people navigate space, by developing novel and appropriate AI models and simulations of human movement behaviour.

The project builds on a unique, cutting-edge data set. Collected in a large human movement study at UCL's Person-Environment-Activity Research Laboratory (PEARL), over 100 people were tracked in a controlled environment and data collected of their movement, brain activity, physiological responses, eye movements, as well as subjective spatial experience; additional studies are planned in the coming years.

In collaboration with Autodesk Ltd, the student will focus on differences between individuals and between groups, as well as different types of environments, to expand existing models of movement and spatial analysis and aim to improve both accuracy and diversity.

How to apply: <https://www.ucl.ac.uk/epsrc-doctoral-training/prospective-students/apply-ucl-epsrc-landscape-award-uela-studentship>

Specific research problem and potential impact

Current models of human movement are based on assumptions that may not hold true for everyone, and often overlook individuals with unique behaviour, as well as people navigating atypical environments. The knowledge and technology developed will improve the design of spaces that support diverse populations in future smart cities and built environments.

Timeline and scope

September 2025 to September 2029

The PhD is supervised by [Sean Hanna](#), Professor of Design Computing, and [Fiona Zisch](#), Associate Professor in Architecture and Director of Design for Performance and Interaction. The successful applicant will join the new [Centre for NeuroArchitecture & NeuroDesign](#) jointly launched by UCL and RISE (Research Institutes of Sweden).