





# Artificial Intelligence in Building Design Processes and Collaboration in Mixed Teams of Humans and Robotic Agents



Dr Baran Cürüklü

Dr. Baran Cürüklü is Senior Lecturer at Mälardalen University, Sweden.

Time: 4pm - 5pm, 17 March 2023

#### Zoom meeting room:

https://ucl.zoom.us/j/5942880382

### Presenter Introduction:

Since 2015, he has been an active researcher in multi-agent systems, which collaboratively, and together with humans solve complex problem. Baran has also as workpackage leaders in several European projects designed, planned, and orchestrated demonstrations at the technology readiness level (TRL) 4-6. These research lines assume: orchestration of complex missions involving autonomous robotic systems; population-based search (Evolutionary algorithms); intelligent and adaptive agent architectures; human-system interaction.

## Presentation Summary:

Advancements in artificial intelligence (AI), sensor technologies, communication technologies, hardware and embedded systems have helped to support design and implementation of complex solutions. These solutions, of products, play a key role in novel services and business models. These there is a strong link between pure engineering R&D and innovations that help our societies to prosper. In this talk we will look into complex solutions consisting of robotics systems that collaborate with each other, orchestrated by humans in the context of large European projects. Recently AI has been used in building designs, however, the question is if this approach is novel and powerful enough to change the way architects and designers work.

## Organizers:

Department of Civil, Environmental and Geomatic Engineering, UCL
The Bartlett School of Sustainable Construction, UCL
CIBSE Intelligent Buildings Group



LECTURE SERIES NO.5

**BUILDING ENERGY**