

## **Sense Adapt Create**

# **Using Mixed Realities to Explore Augmented Collaborations**

Interdisciplinary Summer School Ghent, Belgium - August 15 -25, 2023

Today's increasingly connected and complex world, requires attitudes, entrepreneurial skills, and knowledge that transcend individual disciplines. This Summer School will provide an interdisciplinary platform for students to acquire the necessary skills by adapting STEAM (Science, Technology, Engineering, Arts and Mathematics) principles.

Students from Engineering, Architecture, and Arts, will enhance their skillset by collaborating on a joint and multidisciplinary project. In architecture, arts and engineering, meeting in physical space for brainstorming and design ideation is essential for collaboration. Walls, tables, pens and paper are surfaces for exchanging and testing design ideas. A number of digital tools increasingly support similar processes of collaboration, as we all have learned through the recent covid 19 pandemic. These digital tools also provide benefits for capturing and streamlining design processes, such as exploring design variations, and version tracking, and allow for shared authorship. parametric modelling and computational design are used to generate variations of structures, evaluate and evolve, and collaboratively make a selection of structures to be realised as scale 1:1 installations. Rather than using plans and sections, Augmented Reality is deployed to project a digital model of the final structure and the overlaying metadata with instructions on how to assemble it. Through 3D scanning and sensors, it can continually be measured how the physical structures differentiate from the digital model and adapt either if necessary.

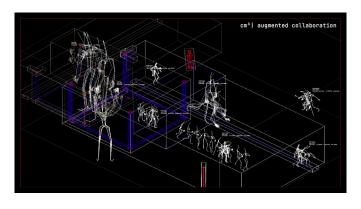
#### **Organization Team**

dr. Gilles Callebaut<sup>1</sup>, dr. Corneel Cannaerts<sup>2, 3</sup>, drs. Weronika Gajda<sup>1,2</sup>, dr. Liselotte Vroman<sup>2</sup> and Joris Putteneers<sup>2</sup>

With contribution and supervision of Kasper Jordaens<sup>4</sup>, prof. Christophe Barlieb<sup>3, 5</sup>, Dimitri Coppens<sup>1</sup>, prof. Anders J Johansson<sup>6</sup>, Anders Warrel<sup>6</sup> and other invited lectors.

#### When?

Arrival: before August 15th 2023 Summer school: August 15th-25th 2023 Departure: after August 25th 2023



#### Where?

On different locations in and aroud Ghent. Amongst others: Kasteel "Ter Beken", Mariakerke; Campus Sint-Lucas, Ghent and Ghent Technology Campus. Accomodation for participants is provided during the period of the Summer School.

### **Application and Deadlines**

Eligible for participation are all (international) 3th Bachelors or Master students in the fields of Architecture, Urban Design, Arts and Engineering, as well as young reseachers and recent graduates coming from the aforementioned fields.

Deadline for application: May 14th 2023 Confirmation of acceptance: June 5th 2023 Interested candidates should send their CV, a motivation letter (maximum 300 words in English), including a link to a portfolio (if relevant) to: summerschool@creativemakers.xyz

#### Fee

Students enrolled in programmes at participating universities pay a reduced registration fee of 50 EUR that will be refunded after show-up.

Fee for other participants from outside the participation institutions: 250 EUR (including lunches and accomodation). The participation fee is paid only when the registration is approved.

#### Certification

All participants receive a certificate of participation (3 ECTS credits). Students of the Faculty of Architecture and Faculty of Engineering Technology validate participation in the follow-up track via respectively the elective 'Participation in International Projects' and 'Creative Makers' in the following semester.

<sup>1</sup> Faculty of Engineering Technology, KU Leuven, Belgium

<sup>2</sup> Faculty of Architecture, KU Leuven, Belgium

<sup>3</sup> Fieldstations.net

<sup>4</sup> LUCA, School of Arts, Association KU Leuven, Belgium

<sup>5</sup> Faculty of Architecture, OTH Regensburg, Germany

<sup>6</sup> Faculty of Engineering, Lund University, Sweden



Overall, by participation one will learn to collaborate with other disciplines and achieve some particular skills such as:

- using various emerging technologies to preceive, sense and interact with enviornements
- processing data through integrating it within creative processes
- working with time-based media

The Summer School frames within a broader project called "Creative Makers", which aims to connect different creative disciplinces through emerging technologies. As such, learning results from interdisciplinary cocreating, discussing and reflecting. As we are committed to making this a long-term initiative and organising this Summer School annually, next to several other multidisciplinary initiatives (e.g. invited guest lecturers, elective course, etc.), to establish STEAM learning within each of the involved disciplines.

#### **More Information**

website: creativemakers.xyz

contact: summerschool@creativemakers.xyz















