

Master's Thesis Internship Proposal: Design of a Hybrid Collaborative Room (EU4DUAL program)

Involved EU4DUAL entities:

- ESTIA-Research, ESTIA, Bidart, France
[<https://www.estia.fr/recherche>]
- Innovation in Industrial Design, Mondragon University, Arrasate - Mondragón, Spain
[<https://research.mondragon.edu/grupos/32440/detalle>]

Keywords

Remote Communication - Ubiquitous Computing - Human-Computer Interaction- Product/System Design - Augmented Reality – User Experience

Required Qualifications:

- Master's level (M1/M2) or Bachelor last year in Interaction Design, Human-Computer Interaction, Robotics, Mechatronics, Computer Science, or Electronics.
- Autonomous, creative, and proactive, with a problem-solving mindset.
- Proficiency in prototyping tools
- Experience with user testing methodologies and usability evaluation (Appreciated but not mandatory)

Expected dates

6 months in 2025

Location: ESTIA, Bidart (France), with potential travel to Mondragon (Spain).

How to apply?

Applicants should submit a full CV, and a brief description of their interests. We will contact the selected candidates for an interview.

Contact

Nadine Couture, Full Professor and Ganix Lasa Erle, PhD. Design Lecturer and Researcher
n.couture@estia.fr and glasa@mondragon.edu

Project

The goal of this project is to design a Hybrid Collaborative Room that allows multiple individuals to work across various open spaces while fostering the impression of a unified, single open space. This concept aims to enhance the hybrid collaboration experience, leveraging tangible and digital interaction design to bridge physical and virtual divides. The project's primary application is the development of the EU4DUAL Room, intended to serve members of educational and research institutions within the EU4DUAL alliance ([EU4DUAL Website](#)).

Key objectives include understanding the needs of hybrid work environments, exploring innovative interaction design solutions—including the use of advanced technologies like mixed reality and tangible interfaces—and validating them through iterative prototyping and user testing.

Preliminary Work Plan:

1. **Needs Analysis:** Identify user requirements for hybrid collaborative environments.
2. **State-of-the-Art Analysis:** Review existing solutions and relevant research.
3. **Ideation:** Generate innovative concepts for hybrid collaboration, with a focus on integrating specific technologies such as mixed reality and tangible interfaces to enhance the experience.
4. **Prototyping:** Develop mockups and functional prototypes of the proposed solutions.
5. **Optimization:** Refine the designs through iterative feedback.
6. **Evaluation:** of the prototypes in real-world scenarios with users, applying both qualitative and quantitative methods to assess usability, efficiency, and overall experience.

Expected Deliverables:

A comprehensive specification document outlining the requirements and design recommendations for implementing the Hybrid Collaborative Room.