RESEARCH THEME

XLI Cycle – a.y. 2025/2026

Title of the doctoral research   Sustainable Interaction Design

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Abstract

As digital technologies increasingly shape our everyday lives, the environmental impact of interactive systems has become a critical concern. This PhD research explores Sustainable Interaction Design (SID), focusing on strategies to reduce energy consumption, minimize e-waste, and promote long-term usability in digital interfaces and services. The study aims to bridge interaction design, human- computer interaction (HCI), and sustainability, developing frameworks and design principles that encourage eco-conscious design, user behaviors and system efficiency.

Key research questions include:
How can interaction design influence energy-efficient behaviors? What role does longevity and repairability play in sustainable UX? How can digital interfaces communicate environmental impact to users effectively?

The research will employ design-driven methodologies, prototyping, and user studies to test sustainable design interventions. The goal is to define actionable guidelines for designers, policymakers, and developers, contributing to a more sustainable digital future.

Keywords   Sustainable Interaction Design, Research Through-Design, Sustainable HCI