RESEARCH THEME

XL cycle – a.y. 2024/2025

Title of the doctoral research	Generative AIs and Computational Approaches in Communication Design

Proponent professor	Marco Quaggiotto

Abstract

In the context of digital transformation, the transformation of practices, tools, media and communication systems has had a significant impact on communication design, both in terms of its tools and methods. As a general trend, advances in information technologies, smart supports, and the more recent revolution brought about by machine learning technologies are pushing visual and communication design towards new scenarios with a strong presence of systems that operate either in support of human designers or autonomously in the context of smart devices.

In this latest digital transformation, communication design, which has long been computer-aided, is becoming increasingly computational: new dynamic contexts, in which the relationships between content and representation can no longer be statically defined, require new methodologies that allow for the description of communication design artifacts in terms of systems, processes and models that manage this translation.

In this research framework, the current theme aims to explore the possible interactions between the abductive sensemaking process of design and the logic-deductive skills of computational thinking, with the aim of investigating areas related to: the impact of digital supports and technologies on communication design skills and educational strategies; the potential of computational methods to address design challenges in dynamic media, supports and content; the implications of generative AI and large language models for communication design practice and education; the skills that the next generation of designers will need to effectively use these technologies in their work.

Keywords	Communication Design, Computational Design, Generative AI