

# IMPACT OF AI ON UI/UX DESIGN AND RESEARCH: LEVERAGING PROCESSES AND SHAPING THE FUTURE OF USER EXPERIENCE

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**Abstract.** *The rapid evolution of artificial intelligence (AI) is profoundly reshaping the domain of user interface and user experience (UI/UX) design as well as the accompanying research practices. This paper investigates how AI-powered methods and tools are redefining the ways designers conceptualize, develop, and evaluate user experiences. Through an analysis of the current state of UI/UX design and its growing integration with technologies such as generative models, predictive analytics, and automated usability testing, the study reveals the emerging opportunities and challenges within this evolving discipline. It emphasizes how AI enhances designers' capabilities across key stages of the process – ideation, prototyping, user research, and assessment – by supporting more data-driven and adaptive decision-making. Additionally, the paper considers the ethical, creative, and methodological dimensions of human-AI collaboration in design. Finally, it outlines possible directions for future UI/UX research, emphasizing the importance of interdisciplinary approaches that align technological innovation with the core values of human-centered design.*

**Key words:** Artificial Intelligence (AI), UI/UX Design, UI/UX Research, Human-Computer Interaction (HCI), Personas, Design Automation, Design systems, AI-Assisted Research, Generative Design, Human-AI Collaboration, Ethical Design, Future of Design, Design Process Optimization, Research Process Optimization.

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