INTEGRATING COMFYUI INTO CREATIVE AI ELECTIVES: A HANDS-ON APPROACH TO GENERATIVE WORKFLOWS

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Abstract. *This paper presents a pedagogical case study on the integration of ComfyUI, a modular visual interface for diffusion-based generative AI, into a university elective course on creative AI tools and methods. The study explores how node-based AI workflows foster a deeper conceptual understanding of generative processes compared to text-prompt-only systems. By engaging students with visual computational graphs, model parameters and control nodes, the course design emphasizes transparent reasoning, experimentation and reproducible creative outcomes. Observations from teaching practice suggest that ComfyUI enhances students' intuition about data flow, model architecture and the creative affordances of AI tools. The findings highlight ComfyUI's potential as both a learning instrument and a bridge between artistic and technical disciplines within higher education.*

Key words: ComfyUI; Diffusion Models; AI Education; Creative Workflows; Visual Programming; Computational Art; Generative AI.

Acknowledgments

The work was supported by project No. FP25-FMI-010, "Innovative interdisciplinary research in Informatics, Mathematics, and Pedagogy of Education", of the Scientific Fund of the Paisii Hilendarski University of Plovdiv, Bulgaria.

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