GENERATIVE VISUALIZATION – PROFESSIONAL STUDENT TRAINING

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Abstract. The popularity of Generative Artificial Intelligence (GenAI) services sparked interest in applying these new tools to a variety of practical enterprise applications. New types of generative AI are continuously emerging and being used to generate images, video, audio, synthetic data, translation into different languages, etc. In this paper, we present the main highlights and results achieved in the training of students from computer science majors at FMI in the elective course "Introduction to Generative Visualization". Basic techniques from mathematics, physics, and fine arts that are used by artists, designers, and musicians in the creative industry are discussed. Some generative compositions created by the students in the Processing visual programming environment and printed on a 3D printer are presented.

Key words: Generative visualization, generative AI, Generative Design, 3D Printing.

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