

“FONT MANAGEMENT WITH ARTIFICIAL INTELLIGENCE”

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Effective font management is a crucial aspect of productivity and creativity in modern design. Thanks to artificial intelligence (AI), designers have gained powerful tools for optimizing font selection, organization, and customization. This work explores AI's key capabilities in font management and its impact on design processes.

Artificial intelligence analyzes images and extracts unique characteristics such as strokes, curves, and spacing to recognize and identify fonts. This allows designers to find suitable styles for their projects. AI also tags and categorizes fonts, simplifying their organization based on style, weight, purpose, and other parameters. By analyzing typographic characteristics, AI suggests harmonious combinations of fonts, helping designers quickly find appropriate options. Additionally, AI generates visual samples of text in different fonts, enabling instant evaluation of their overall appearance.

Another important aspect is font licensing and compliance with usage terms. AI algorithms analyze embedded fonts in design files to ensure they meet licensing requirements. This helps designers avoid copyright violations and update licenses on time. At the same time, algorithms can suggest alternative free or licensed options, significantly easing the selection process.

AI also enables the modification of existing fonts or the creation of new ones by adjusting thickness, width, serifs, and other parameters. Generative models such as GANs (Generative Adversarial Networks) and VAEs (Variational Autoencoders) analyze the structures of existing font styles, opening new possibilities for personalized design. Furthermore, variable fonts, which adjust their parameters in real-time, are becoming more accessible thanks to AI. This work discusses an AI-developed font.

Beyond purely design-related tasks, artificial intelligence enhances text readability. It analyzes the context of font usage and automatically adjusts size,

spacing, and color depending on the display environment. Ensuring readability across different devices is particularly important for web and mobile application design.

Overall, artificial intelligence transforms font management, making processes more efficient, precise, and creative. AI-powered recognition, categorization, combination, customization, and licensing of fonts open new opportunities for designers. Despite certain challenges, such as legal aspects and the need for model improvement, the prospects for AI integration into design are clear. In the future, AI technologies will become even more influential in typography and design.