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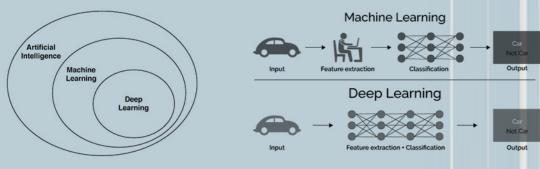
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SURVIVING IN THE AI WORLD AS AN ARCHITECT

English for Architects: Summer 2023 Victor Beomseung Jo

1. Introduction



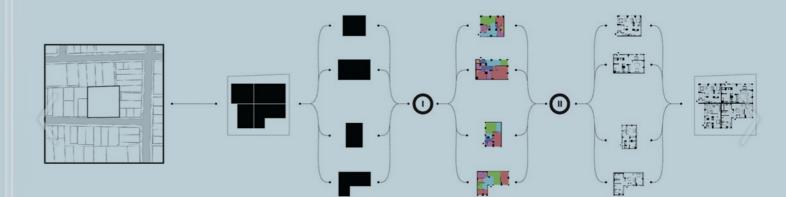
<Overview of Artificial Intelligence>

<Comparing Deep Learning with Machine Learning>

Leach's perspective¹ highlights that Artificial Intelligence (AI) emulates human cognitive abilities but defining AI becomes complex due to its surpassing of human intelligence in diverse fields. Campo and Leach² propose distinguishing AI from human intelligence as AI lacks self-awareness. This leads to the idea of "invisible AI," present everywhere yet unseen due to its intangibility. Understanding AI involves grasping its categories: 'Machine Learning' and 'Deep Learning.^{13 4} McKinsey Explainers⁵ describe Machine Learning as data-trained algorithms that enable AI to predict and recommend based on pattern analysis. Deep Learning, resembling neural interactions, empowers AI to analyze various data sources, matching or exceeding human abilities. Chailous⁶ notes architecture's rapid embrace of AI's benefits, bridging architecture's complexity and AI's technology through architects' insights. This poster aims to explore current AI applications in architecture and their future direction, focusing on architects' roles.

2. Current State: From AI to Architecture

Cutieru explores Chailou' s experiment showcasing AI's role in architectural planning.⁷ The experiment involves training an AI model on architect-designed rooms' data to identify common patterns for optimal room size. Architects input specific boundaries during planning, and AI, empowered by deep learning, generates floor plans and furniture arrangements.(see Figure1).⁷ Architect opinions are integrated at various stages, highlighting AI-human collaboration. Globally renowned architecture firms, like Zaha Hadid Architects (ZHA), leverage AI for innovative concepts.⁸ ZHA uses DALL-E2, their AI tool, to generate diverse building images (see Figure2). Patrik Schumacher, a ZHA principal, praises AI's ability to generate impactful ideas with minimal inputs, leading to compelling architectural concepts. AI-generated architectural images demonstrate completeness suitable for the contemporary architectural market.



< Figure 1 Study of the Potential of AI in Space Organization and Architectural Layouts >

* This image created by AI from a few words and references. The layout and format of this article are also the result of AI using my essay.

Step1. Putting words into AI Poster, AI for architecture, Artificial intelligence, Technophobia, human intelligence, Zaha Hadid Space Organization, Layouts

Step2. Extrack the image you want: Choose one(U2) of the 4 images presented, and then choose one(U3) of the 4 similar images that are more advanced in U2.

3. The Future

See

Despite the positive aspects, concerns about AI's integration in architecture persist. Architects witness

AI's rapid rise with trepidation. Roman advocates introspection amidst technological advances, reminiscent of initial apprehensions around 3D printing's impact.⁹ The adoption of such technology resulted in unfavorable outcomes, diminishing personal sensitivity, individual style, and subjectivity.

Architectural interpretation remains pivotal. AI's substantial t contemporary impact prompts reflection on its advantages and disadvantages. The ongoing transformation sparks questions about AI's future trajectory and the societal changes it will bring. This uncertainty underscores the dynamic evolution shaped by AI's continued development.





Step3. It was worked using **Photoshop** as an image (U3) on the **Midjourney AI** site.

4. Blurring of Field Boundaries and Visible AI

AI's power stirs technophobia and apprehension globally. Its influence spans all sectors, with AI potentially outmatching architects' design skills and English teachers' instructional prowess. Industry and field boundaries are eroding due to AI's ubiquity, empowering individuals to become artists or architects with AI's aid. However, a crucial question arises: Would you choose AI over renowned professionals? The answer lies in AI's inability to truly impress or provide the human warmth intrinsic to educators.

Human identity emerges as a pivotal factor in judgment, transcending mere outcomes. Industries reliant on repetitive tasks might vanish as AI proliferates, but human individuality gains prominence. This evokes the example of Refik Anadol, an artist who effectively combines his identity with AI to craft distinctive creations. Integrating human essence and AI yields a "VISIBLE AI" realm, where architects harmonize identity and technology, akin to surfers navigating AI's currents while maintaining their uniqueness.

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< Figure 2 A Presentation Showing Prompts Typed into DALL-E 2 >