



Topic of the Speech:

Implementation of Clothing from Conception to Design Based on the AGI's Diffusion Transformer Framework

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Aris Rui Huang, Founder of Chengdu Swiftchain Technology Co., Ltd., Senior system architect, Visiting associate professor of Xihua University, Columnist of "JINSE" and "8BTC" and "WHOSHIPM" and "WEIYANGX", Blockchain expert of AISINO Co., Ltd, Blockchain expert of Beijing Informationization and Industrialization International Information Technology Research Institute, The initiator and technical leader of the project "Application of Blockchain Technology to Improve China's Infectious Disease Surveillance System" of NSSFC, and the initiator and solution writer of "Blockchain-based Industrial Products Anti-counterfeit Traceability Platform" of 2020 Industrial Internet Innovation and Development Project-Blockchain Public Service Platform Project of MIIT, core team member of "Non-Bank Financial Business Credit Technology Path Research" (2019) of Baihang Credit, and former CRM system expert of AsiaInfo (China) Co., Ltd. He has participated in more than 20 large-scale domestic and foreign large-scale telecommunications, finance and blockchain industry application projects, and published many high-quality, industry-influential papers and Internet articles.

2020.11-Present, The blockchain expert of Special appointment of AISINO Co., Ltd. Responsible for a consult in the "Blockchain-based Industrial Products Anti-Counterfeit Traceability Platform" of 2020 Industrial Internet Innovation and Development Project-Blockchain Public Service Platform Project of MIIT of China.

2020.9-Present, Visiting associate professor of XIHUA University of China. Responsible for researching the application of blockchain in the real industry.

2020.2-Present, The project technical director of the project "Application of Blockchain Technology to Improve China's Infectious Disease Surveillance System" of NSSFC of China.

2018.11-2019.8 System architect of "Non-Bank Financial Business Credit Technology Path Research" (2019) of Baihang Credit Co., Ltd. Responsible for Blockchain credit system architecture design.

2018.3-2018.11 Solution Manager, Product Director of Higgs Chain Co., Ltd. Responsible for the expansion of blockchain technology in the physical industry and the design of blockchain products and solutions.

2011.6-2017.9 Solution architect, product architect, R&D director of AsiaInfo Technology (China) Co., Ltd. Responsible for telecom BOSS system R&D

2004.4-2011.6 Project implementation engineer, product development engineer, project manager, technical manager of Linkage Technology (Nanjing) Co., Ltd. Responsible for project implementation.

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ABSTRACT (NO MORE THAN 500 WORDS:)

With the rise of large-scale language models like ChatGPT, the application of Artificial General Intelligence (AGI) in various fields has attracted widespread attention. In the realm of fashion design particularly, the integration of AGI technologies has paved new avenues from concept to design. Despite breakthroughs in natural language processing and image generation by technologies such as Diffusion Transformers (DiT), applying these advancements to fashion design presents challenges due to the myriad of considerations, including style, trends, functionality, and cost. While AGI has the potential to expand design thinking and creativity, key challenges lie in achieving continuity, precision, and adjustability in designs.

Traditional fashion design demands high iteration and customization, where AGI-generated designs often fall short in fine-tuning. This study conducts a comparative analysis between the needs for continuity, precision, and local adjustability in fashion design and the consistency, innovation, and integrity of mainstream AGI-generated results. It proposes an incremental generation method that allows for progressive refinement and adjustment on AGI-generated bases, thereby meeting the requirements for continuity and adjustability. Through phased design and incremental modification, coupled with the use of conditional control and the fusion of multiple diffusion paths, this approach not only improves the controllability of the design but also enables dynamic optimization based on designer feedback.

Although there are still many challenges in the practical application of AGI technologies in professional fields, the trend towards advancing the application of AGI in fashion design is gradually taking shape. This could potentially revolutionize the way the fashion industry creates and produces. By combining the innovative potential of AGI with the practical needs of design, we provide designers with a more powerful and intelligent tool, thus promoting innovation and development in the fashion industry.