

## Fast Accounting's Image Processing Technology Research Paper Accepted for the World-Renowned IEEE ICIP 2023 Conference

### Groundbreaking Character Recognition Research Utilizing Generative AI

TOKYO – [Fast Accounting](#) is pleased to announce that our research paper titled "DiffusionSTR: Diffusion Model for Scene Text Recognition" has been accepted for presentation at the prestigious IEEE ICIP 2023, an international conference on image processing technology, to be held in Kuala Lumpur, Malaysia from October 8th to 11th, 2023. This research represents a groundbreaking study in text recognition, applying the innovative generative AI technique of diffusion models.

The preprint of the accepted research paper is available for viewing on arXiv at the following link: <https://arxiv.org/abs/2306.16707>

Typically, text recognition technology has focused on converting digital text from images that contain the desired text. However, a new method presented in the research paper accepted by ICIP takes a different approach. It uses generative AI techniques to start with a random string of characters and then gradually improves it by incorporating the input image. The method keeps refining the string until it accurately represents the intended text. In the end, this novel approach generates the recognized text. This innovative technique reimagines the conventional text recognition process by leveraging the potential of generative AI.

The co-founder and Chief Research Scientist of Fast Accounting, Masato Fujitake, who led this research, stated the following: "We firmly believe that the outcomes of this study will have a significant impact on the future of text recognition technology. The diffusion model utilized in generative AI enables more advanced text recognition, and we believe it can contribute to various industries and fields through its applications."

Keitaro Mori, the President and CEO of Fast Accounting, said with regard to the acceptance of the paper, "We take great pride in the acceptance of our generative AI-based text recognition research at the international academic conference. Moving forward, at Fast Accounting, we will devote our efforts to further research and practical applications of generative AI in the field of accounting. By doing so, we aim to remove various constraints in accounting tasks and become a company that instills confidence and courage in our clients."

Since its founding in 2016, Fast Accounting has been dedicated to researching and developing text recognition technology, aiming to address various challenges faced by our clients in accounting tasks. The company values the importance of contributing to our clients by continually pursuing new technologies such as generative AI and Large Language Models (LLMs) to enable a multi-faceted approach.

Fast Accounting believes that its research on text recognition using generative AI will contribute to further advancements in the field of text recognition technology. At Fast Accounting, we are committed to strengthening our research in not only recognition and detection AI technologies

but also generative AI such as LLMs. By incorporating these technologies into our service development, we will continue to support a wide range of customers in the field of accounting and finance.

### **About Fast Accounting**

Fast Accounting harnesses the power of AI to drive businesses focused on streamlining and automating accounting processes. With a strong focus on advancing character recognition technology, we conduct extensive research not only in computer vision but also in cutting-edge areas such as generative AI and Large Language Models. Our research findings are actively shared through presentations at prestigious academic conferences. Moreover, we leverage these research achievements to develop tailored services for numerous large corporate clients and accounting vendors. Our ultimate purpose is to 'remove constraints and instill confidence and courage.' By leveraging AI technology, we are dedicated to eliminating various operational constraints for our clients, enabling them to concentrate on more value-added tasks. For further details, please refer to the information provided below.

<https://www.fastaccounting.jp/en/>

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