SMU | Sim Kee Boon Institute for Financial Economics

SKBI Industry Workshop

AI Meets Finance
A Computer Science and Industry Perspective

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David Cui
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Benedict Lim
Head of Data Science and AI Project Management Lead Investment Insights Department, GIC

Feida Zhu
Associate Professor of Computer Science; SMU School of Computing and Information Systems

Event Summary

In the area of AI development, the speakers agreed that multimodality data analysis, the ability of AI to handle a combination of different data types such as text, video, trajectory data, social network data and more, is unprecedented. Benedict Lim affirmed that in a recent experiment with Chat GPT vision, it demonstrated a robust ability to analyse diverse inputs such as research reports, bar charts and tables.

David Cui emphasized that the two prerequisites needed for an AI-driven network effect are (1) owning a large amount of proprietary data, and (2) having frequent feedback to train the AI system. He is of the opinion that Consumer Banking, with its large amount of users and hence data, as well as the short return segments, has a strong potential to benefit from AI. He cited that this is why many Buy Now, Pay Later providers are run by fintech companies.

Building on this logic, he noted that AI has a limited impact on investment banking due to the lack of proprietary data. Even though quant trading makes up more than 50% of daily transactions, David noted that the profit they can extract is quite limited. Renaissance Technologies was a rare success case, but its success was not replicable as seen in the mediocre performance of their public fund.

Feida Zhu added that AI will not change how things fundamentally work in the traditional sense of the financial industry, even if there might be ways that AI can help save costs or improve efficiency. However, AI is making headway when comes to decentralized finance and the tokenized economy.

Both Feida and Benedict highlighted that in today's climate, everyone realizes that they can benefit from working with each other in the data intelligence computational power ecosystem. In the past, companies would create their own "brains" and proprietary systems. But now, many companies leverage and collaborate with Big Tech firms using open AI systems. This leads to the accessibility to technology and uptake on innovation where companies are now building products wrapped on top of open AI models.

During the Q&A, the panelists addressed concerns on governance and accountability in the use of AI in decision making. Also known as Collaborative Intelligence, this speaks of the collaborative nature between AI and humans to make decisions, with humans taking responsibility for the final decision. Feida added that it is the job of a data scientist is to translate big business problems from top management into manageable data science tasks that AI can then solve. Benedict mentioned that it is not AI that ultimately convinces management of making a decision, but humans presenting and influencing management using analytics done by AI. Hence, AI does not fully replace humans.

In closing, Feida warned that society needs to find alignment between AI systems and our human value system. He cited a local example, the MAS' framework for responsible use of AI, also known as the Veritas Initiative. More information about this initiative can be found here >> https://www.mas.gov.sg/schemes-and-initiatives/veritas

All opinions expressed by the panellists are their own and do not reflect those of their respective organizations.