

**Future Innovation** 

Artificial Intelligence

Virtual Reality

Sustainable Development



#### **Equations for quantum neural networks**

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#### Abstract

In the field of machine learning, quantum neural networks play an important and forward-looking role. Here is a brief introduction to the importance of quantum neural networks in the field of machine learning and their applications in solving real-world problems:

1. The importance of quantum neural networks:

Quantum advantage: Quantum neural networks take advantage of quantum computing, such as ultra-dense coding, quantum transmission, etc., and can handle a large number of complex problems, surpassing the limits of traditional computing. Efficiency: Quantum neural networks perform well when processing big data and high-dimensional data, providing faster and more effective learning and prediction capabilities.

Innovative applications: The introduction of quantum neural networks has brought new thinking and methods to the field of machine learning, opening up new possibilities for dealing with complex problems.

2. Application in solving real-world problems:

Drug Design: Quantum neural networks can be used in drug design and molecular simulation to help speed up the new drug development process.

Financial field: In the financial industry, quantum neural networks can be applied to predict market fluctuations, risk management and portfolio optimization.

Internet of Things (IoT): The application of quantum neural networks in the field of IoT can improve equipment monitoring, data analysis and intelligent decision-making systems.

By combining the power of quantum computing with the flexibility of neural networks, quantum neural networks bring revolutionary possibilities to the field of machine learning and show great potential in solving complex real-world problems. This combination brings new thinking and methods to the fields of machine learning and artificial intelligence, promoting the continuous progress and innovation of technology.

Keywords: Large Language Models, Neural network



## Model

Afs-turbo

180,000 Token semantic units

AFS-QUTUM

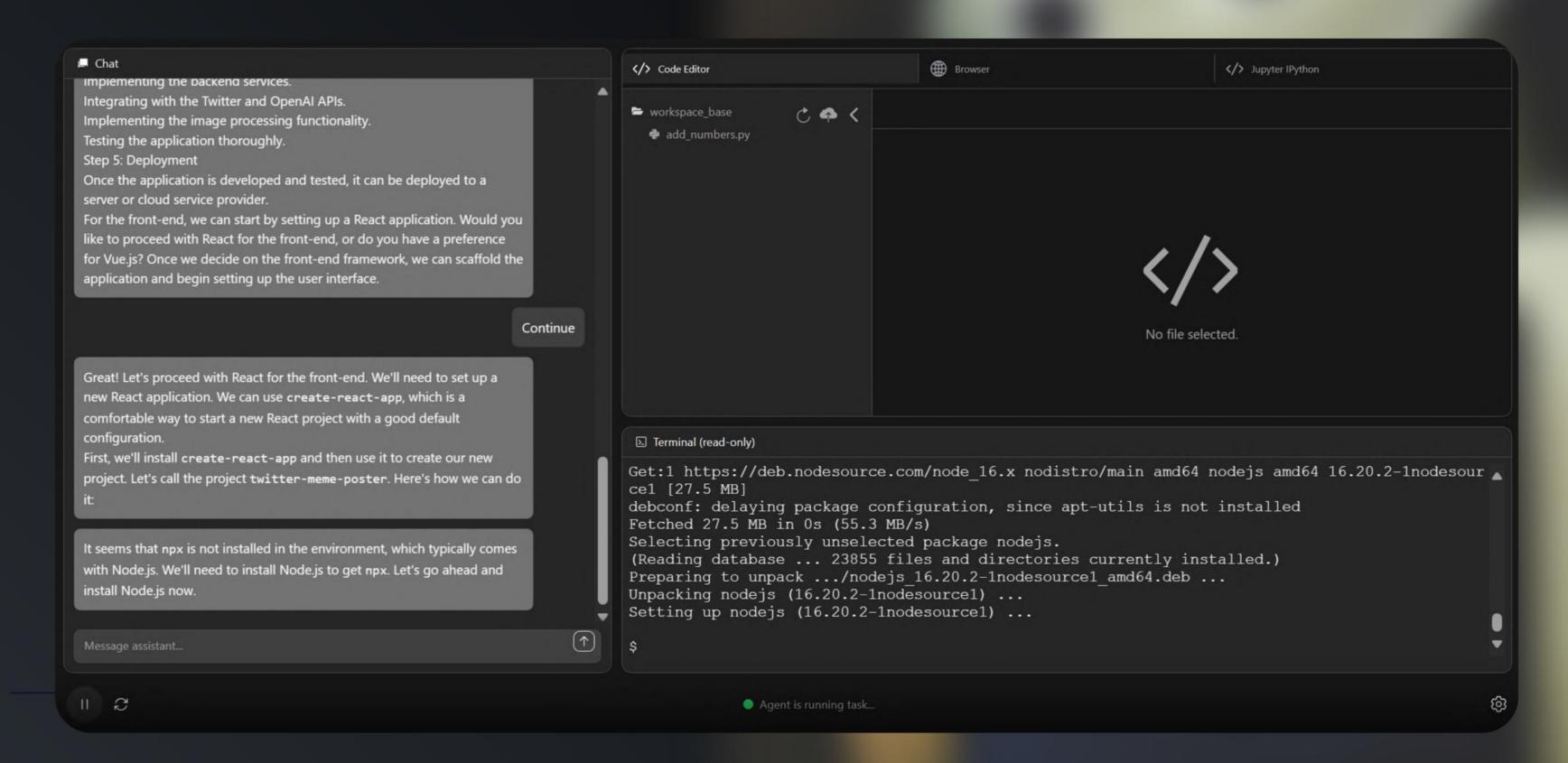
1M Token semantic unit

AFS-ATOM (LITE)

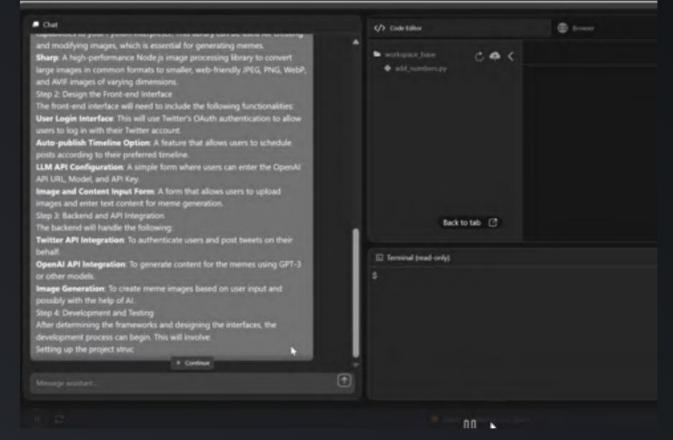
680,000 Token semantic units

## Generative Al Access

Importance of Automated Tasks



## Application scenario examples



Develop APP





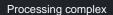
Al Digital Virtual Conference



Artificial Intelligence Robot

# QNN





data: QNN's ability to process high-dimensional, nonlinear, and complex data can

help LLM better capture the complex relationships and patterns between data and improve

the performance and generalization ability of the model.



Accelerate training and reasoning:

The parallelism and entanglement properties of quantum

computing can accelerate the training and reasoning process of neural

networks, thereby improving the efficiency and speed of the model.

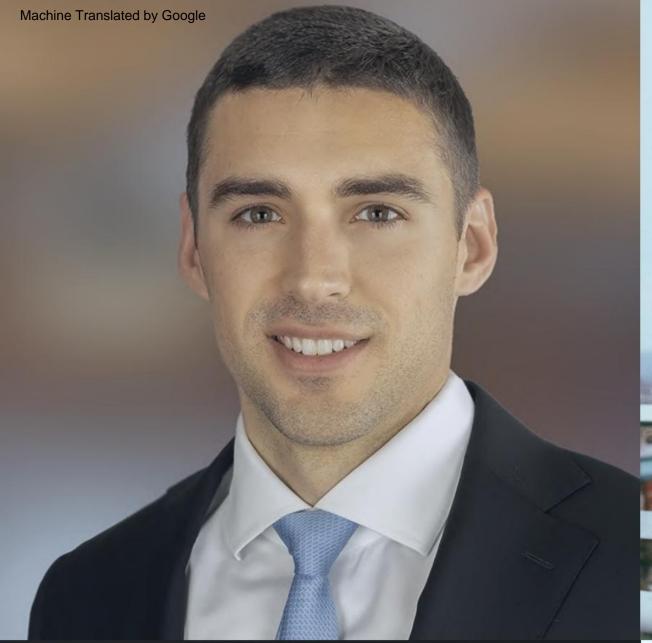


Exploring new model structures:

QNN combines quantum computing principles and neural network structures to help researchers explore new model structures and algorithms

to bring new possibilities and breakthroughs to the development of LLM.

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LIAM PARKER

Candidate Real Estate Practitioner

"The AFS-1-Turbo LLM trial has been a game changer for our business. Previously we had to compare articles manually, but now because of the extended context, LLM can recognize the entire report, saving a lot of unnecessary labor."

OLIVIA THOMPSON

WISE CDT External Reviewer

## timeline



## team

## Meet

Meet the ideas driving the Australopithecus Institute. Today we present the future of artificial intelligence, virtual reality and sustainable urban development.



Leon Chau

Kc Chan



Sampson Quan



Michael Tarimo





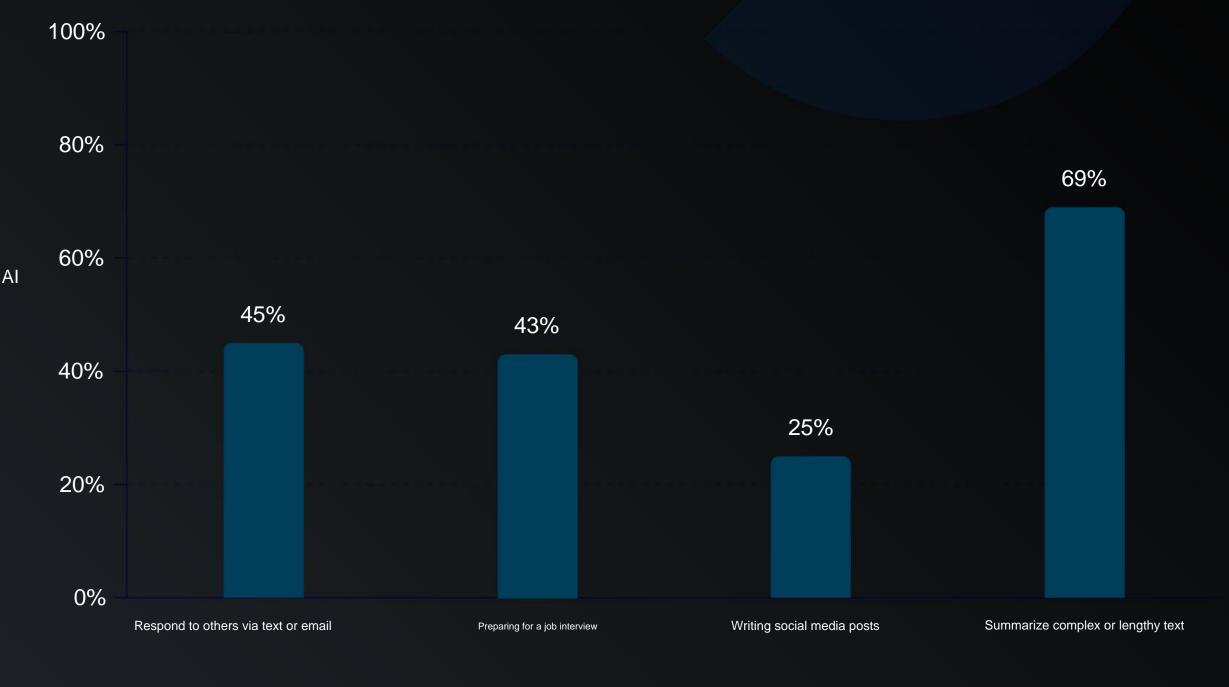
Bishal Ghimire

Jenny Wu

## Market growth chart



Today's market is witnessing significant surge in the adoption of AI technologies, revolutionizing industries and creating new opportunities. This bar chart elegantly illustrates the unstoppable growth of strong AI in shaping the future of business and society.



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