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(57) Abstract :
The present invention relates to an AI-based latency-aware load balancing system for real-time streaming applications. The system dynamically monitors network conditions, predicts potential congestion, and optimizes traffic distribution across multiple servers to minimize latency. By utilizing machine learning algorithms, the system adapts to varying workloads and streaming demands, ensuring uninterrupted data flow and improved quality of service. This intelligent approach enhances user experience, reduces packet loss, and ensures efficient resource utilization across distributed network environments.

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