

# AI-Powered Digital Twin: Personalized Virtual Clones Using GPT-5 and Reinforcement Learning

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**Abstract:** *The concept of AI-powered digital twins introduces virtual clones that mimic a user's communication style, decision-making behaviour, and personality. This research presents a system combining GPT-5 for natural language processing and reinforcement learning for adaptive personalization.*

*Unlike traditional assistants, the digital twin evolves continuously through user interactions, achieving 90% replication accuracy across multiple communication platforms. Built on React.js, Spring Boot, PostgreSQL, and AWS cloud infrastructure, the system ensures scalability and low latency.*

*Ethical considerations like consent, privacy, and identity protection are addressed. Future enhancements include multimodal emotion detection and blockchain-based identity security.*

**Keywords:** Digital Twin, GPT-5, Reinforcement Learning, AI Clone, Virtual Avatar, Personalization, Digital Identity

