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(57) Abstract :
The present invention discloses a Virtual Reality framework for interactive language learning programs integrating a VR headset (101), speech engine (102), NLP module (103), adaptive learning engine (104), cultural environment generator (105), gamification module (106), and user interface controller (107). The framework immerses learners in realistic environments, enabling conversational practice with AI-driven avatars. It provides real-time feedback, adaptive difficulty adjustment, and gamification features to enhance motivation. Experimental validation demonstrated accelerated fluency, pronunciation accuracy, and cultural competence, making the framework an effective, scalable, and engaging language learning solution.

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