

Abstract

AI-Powered East West University Assistants: Leveraging Large Language Model for Enhanced Learning and Engagement

This proposal presents an AI-driven initiative to enhance student support services at East West University (EWU) through the deployment of intelligent university assistants powered by Large Language Models (LLMs) and chatbot technologies. The project addresses persistent challenges faced by students in areas such as course selection, add/drop procedures, admissions inquiries, and academic advising—issues that currently lead to delays, confusion, and administrative inefficiencies. By fine-tuning AI chatbots on EWU-specific institutional datasets and employing Retrieval-Augmented Generation (RAG) techniques, the proposed system aims to deliver accurate, timely, and personalized responses grounded in real-time university data. An initial pilot implementation within the Department of Computer Science will facilitate targeted evaluation and iterative refinement of the solution. Anticipated outcomes include a 40% reduction in query response time, a 25% increase in student satisfaction, and savings exceeding 500 administrative staff hours per semester. Beyond operational efficiency, the initiative aligns with key Sustainable Development Goals by promoting quality education (SDG 4), strengthening innovation and digital infrastructure (SDG 9), and supporting environmentally responsible practices through reduced reliance on paper-based processes (SDG 12).