

AI-Powered Student Assistant

Appu B¹, Dhanush M D², Darshan V N³, Harsha H P⁴, Prof. Harish B M⁵

B E, CSE, Kalpataru Institute of Technology, Tiptur, India¹⁻⁴

Assistant Professor, CSE, Kalpataru Institute of Technology, Tiptur, India⁵

Abstract: This project presents an AI-Powered Student Assistant, a web-based intelligent system designed to support students in academics, career preparation, and productivity management. The platform integrates multiple AI-driven modules, including an academic chatbot, resume analyser, mock interview simulator, AI cover page generator, and smart reminder system. Using advanced Natural Language Processing (NLP) techniques and the Gemini API, the system provides real-time, personalized responses, document analysis, and performance feedback. The chatbot assists with academic queries, the resume analyzer evaluates ATS compatibility, and the interview simulator assesses confidence and relevance of responses. Automated reminders and document generation further enhance student productivity. Experimental evaluation shows improved response accuracy, reduced processing time, and high usability across devices. The system demonstrates the effectiveness of AI in creating a unified, intelligent student support platform suitable for modern educational environments.

The AI-Powered Student Assistant significantly improves student learning outcomes by providing continuous academic support, personalized career guidance, and intelligent automation. By integrating multiple services into a single platform, it reduces dependency on fragmented tools and enhances accessibility for students from diverse backgrounds. The system has strong potential for adoption in higher education institutions as a scalable and cost-effective AI-driven student support solution.

Keywords: AI-Powered Student Assistant