

# **AI-Enhanced Personalized Content Generator**

**V. B. Sakanure<sup>1</sup>, Yuvrajsingh Shekhawat<sup>2</sup>, Pallavi Jadhav<sup>3</sup>, Pooja Raut<sup>4</sup>, Rucha Rakshe<sup>5</sup>**

Professor, Department of Information Technology<sup>1</sup>

Student, Department of Information Technology<sup>2,3,4,5</sup>

Smt. Kashibai Navale College of Engineering, Pune, Maharashtra, India

**Abstract:** *With the explosion of digital content and the growing demand for tailored user experiences, personalization technologies have become essential for sustaining user interest across various online platforms. However, conventional recommendation systems typically rely on historical interactions and static user profiles, failing to capture the dynamic and emotional aspects of user behavior. This research introduces a robust AI-powered system—the AI-Enhanced Personalized Content Generator—which bridges this gap by incorporating real-time sentiment analysis and intelligent profiling to recommend emotionally aligned content.*

*Utilizing Natural Language Processing (NLP), the system interprets users' emotional states from inputs such as typed text or feedback, and adjusts content recommendations—particularly in the domains of movies and music—accordingly. Unlike static recommendation models, this approach adapts continuously through machine learning, refining its output based on real-time mood detection and evolving user interests. Our experiments indicate a marked improvement in user satisfaction and engagement when emotional intelligence is embedded into recommendation engines. The results advocate for a paradigm shift in personalization strategies, highlighting the need for emotionally adaptive systems in the next generation of content platforms.*

**Keywords:** Analysis, Personalized Recommendation System, Sentiment Analysis, Hybrid Recommendation

