Capstone Project Proposal Title

Description of the proposed capstone project.

Project Title: AI-Powered Virtual Presenter

Statement of Purpose

The purpose of this project is to develop an AI-powered virtual presenter capable of delivering professional presentations and handling real-time Q&A sessions. This tool leverages advanced natural language processing (NLP) and text-to-speech (TTS) technologies to enhance engagement and streamline communication in professional and educational settings. The project aims to offer an innovative solution for individuals and organizations seeking to automate presentations with high-quality, interactive delivery.

Objectives of the Study

Automate Presentation Delivery: Transform text-based or slide-based content into coherent, engaging, and professional speeches.

Enable Real-Time Q&A: Integrate dynamic question-answering capabilities to address audience inquiries on the fly.

Enhance User Interaction: Develop a customizable, user-friendly interface for creating and managing presentations.

Achieve Realistic Speech Output: Use state-of-the-art TTS models to produce natural, human-like voice output with emotional intonation.

Improve Accessibility: Ensure the platform can be utilized across various domains, including corporate, educational, and public sectors.

Methodology to Be Used

Research and Analysis: Conduct a detailed review of existing technologies in NLP, TTS, and AI-driven Q&A to identify the best practices and tools.

Development: Design and implement a transformer-based NLP model for speech generation and Q&A, and integrate a high-quality TTS engine.

Prototyping: Build a web-based interface to upload presentation materials, select speech styles, and manage Q&A sessions.

Testing: Validate the system through iterative testing, including user feedback and performance evaluations.

Deployment: Launch a functional prototype for real-world applications, ensuring scalability and robustness.

This project aspires to revolutionize how presentations are delivered, fostering efficiency, inclusivity, and audience engagement.

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