**ABSTRACT**

In an increasingly digital and fast-paced world, efficient note-taking remains a fundamental skill for information retention and productivity. However, manual note-taking can be difficult, especially while making documents, during meetings or lectures. To address this challenge, a Speech-Based Automated Note-Taking System is proposed. This system leverages speech recognition technology to seamlessly convert spoken words into written text, eliminating the need for manual note-taking using machine-learning. The system begins by capturing audio input from a user's microphone or a designated source. A speech recognition engine is employed to transcribe the spoken words into text accurately and efficiently. The resulting text is then processed and organized as notes, which can be saved for future reference. Users are provided with a user-friendly interface that enables them to initiate the speech recognition process, start recording, and manage their notes effortlessly. This Speech-Based Automated Note-Taking System, users gain a valuable tool for capturing and organizing information quickly and accurately, freeing them from the limitations of manual note-making and document preparation.

**Keywords**:

Automated, interface, Speech recognition, machine learning.