**Title:** A Voice – Driven File Manager App using Hidden Markov Model and CMU Sphinx for Android devices

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## ABSTRACT

Speech recognition covers a variety of uses which include controlling certain devices through voice commands. Controlling a file manager of an Android device through voice introduce many trials to the task. In this project, the researchers aimed to prove that the acoustic model created using Hidden Markov Model and CMU Sphinx efficiently and effectively works in controlling a file manager app through a voice command. The HMM-based acoustic model which consists of a language model, vocabulary, and context free grammar were created along with CMU sphinx decoder in order to recognize a voice input and issue a specific file management functionality. The application has undergone various hardware, software and environment testing activities and has proven to be viable in performing the commands issued through voice.

**Keywords:** Speech Recognition, HMM, CMU Sphinx, File Manager, Voice Command Control