



033-RUS

Voice Controlled Personal Assistant Using Raspberry Pi

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The purpose of this paper is to illustrate the implementation of a Voice Command System as an intelligent personal assistant (IPA) that can perform numerous tasks or services for an individual. These tasks or services are based on user input, location awareness, and the ability to access information from a variety of online sources (such as weather or traffic conditions, news, stock prices, user schedules, retail prices, ... etc.).

Using Raspberry Pi as a main hardware to implement this model which works on the primary input of a user's voice. Using voice as an input to convert into text using a speech to text engine. The text hence produced was used for query processing and fetching relevant information. When the information was fetched, it then be converted to speech using text to speech conversion and the relevant output to the user was given. Additionally, some extra modules were also implemented which worked on the concept of keyword matching. These include telling time, local traffic, travel assistant, events, weather, notification from social applications plus one can ask questions to the system, invoke its machine learning otherwise get it from Wikipedia. Many experiments and results were accomplished and documented.