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## **Blind Vision Voice Assistant**

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**Abstract:** Visual Impaired Voice Assistants are software applications that have been designed to provide assistance to visually impaired people by using voice commands and text-to-speech technology. These Assistants use advanced technologies such as speech recognition, natural language processing, and text-to-speech to communicate with the user and perform tasks.

The report will explore the history, technology, benefits, and limitations of Visual Impaired Voice Assistants. The history of these Assistants can be traced back to the 1960s when researchers started exploring the use of computers to help visually impaired people. In the early 2000s, Voice Assistants such as Microsoft's Cortana and Apple's Siri were introduced, which provided greater functionality and could perform a wide range of tasks using natural language processing. The technology behind Visual Impaired Voice Assistants includes speech recognition, natural language processing, and text-to-speech. Speech recognition converts spoken words into text, while natural language processing allows the Assistant to understand the context and intent of the user's input. Textto-speech technology converts digital text into spoken words. These technologies allow visually impaired users to access digital information and perform tasks without the need for visual assistance. The report will also highlight the benefits and limitations of Visual Impaired Voice Assistants. The benefits of these Assistants include increased independence, greater accessibility to digital information, and the ability to perform tasks that would have been difficult or impossible without assistance. However, the limitations of these Assistants include difficulty understanding certain accents or dialects and struggling with background noise.

Finally, the report will discuss the impact of Visual Impaired Voice Assistants on the lives of visually impaired people. These Assistants have revolutionized the way visually impaired people interact with technology and the world around them. They have provided greater independence, increased accessibility, and helped to break down barriers, promoting inclusivity.

**Keywords:** Voice user interface, Speech recognition, Natural language understanding, Conversational AI, Virtual assistant, Smart assistant, Personal assistant

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