Abstract

Speech recognition is potentially a multi-billion dollar industry in the near future. It is a natural alternative interface to computers for people with limited mobility in their arms and hands, sight, hearing limitation. For most current voice-mail systems, one has to follow series of touch-tone button presses to navigate through a hierarchical menu. Speech Recognition has the potential to cut through the menu hierarchy. Recently, neural networks have been considered for speech recognition tasks since in many cases they have shown comparable performance than the
traditional approaches. There are two in-built threads in the recognition system. Thread 1 maintains the details about input acquisition where as thread 2 contains the classifier and decoder. The classifier used in this research is Radial Basis Function Neural Networks. The HMM graph is used as a decoder. The objective of the research is to make sure that the system is free from bugs. 100% accuracy is achieved by the recognition system.

References

- Gurney, K., 1997: An Introduction to Neural Networks, UCL Press, University of Sheffield, pp.no 234.

Index Terms

Computer Science

Keywords

Thread  Recognizer  Hidden Markov Model  Radial Basis Function  Mouse Movements