



# **INFORMATICS INSTITUTE OF TECHNOLOGY**

**In Collaboration with**

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## **PowerVoice**

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# ABSTRACT

A presentation is a direct and real-time information transmission to the receiver where information must be precisely conveyed in a limited amount of time, requiring the recipient to respond and act upon the information.

Even though presenters use different devices when presenting; real-time correction and revision is somewhat difficult. And also controlling presentation slides by using devices or keyboard may lead to cumbersome situations, time consuming and costly.

With a busy schedule, presenters get help from others or use keyboard shortcuts to do alternatives or to prepare presentations. But most users find it hard to learn keyboard shortcuts to make tasks easy.

Automating basic functionalities will give solutions for real-time processing and will increase productivity, time management, and quick adoption for changes and also will help handicapped/disabled people to control and manipulate presentations and be independent.

Further elaborating, this project will enable the presenter to control and manipulate the slides while getting ready for a presentation and also while doing a presentation with voice. Basic functionalities provided by the API are;

1. Add, Edit, Delete content of a presentation (i.e.: slide/slides, title/subtitle, bullet points, and images).
2. Navigation within a presentation.
3. Search keywords or title in a presentation.
4. Check spellings.

The solution is based on text processing (template or keyword matching) along with Natural Language Processing (NLP) which can be incorporated into any presentation software to do the basic functionalities a presenter expects from a presentation software.

Even though some features were developed to a certain extent with some limitations such as adding images, selecting correct word when checking spellings, 80% to 100% accuracy was achieved for all the features, which is accepted by the end users. This was further proven by technical experts.

## **Subject Descriptors:**

- F.4.2 Grammars and Other Rewriting Systems
- H.5.2 User Interfaces
- H.5.1 Multimedia Information Systems
- H.5.2 User Interfaces
- I.2.7 Natural Language Processing

## **Key Words:**

Natural Language Processing, text processing, Universal presentation, Presentation, Voice