Paper Title\* (use style: paper title)

Pranav H  
Dept. of Computer Science  
*Amrita School of Computing   
Amrita Vishwa Vidhyapeetham, Bengaluru, India*

Mayank Pandey  
Dept. of Computer Science  
*Amrita School of Computing   
Amrita Vishwa Vidhyapeetham, Bengaluru, India*

*Abstract*—This electronic document is a “live” template and already defines the components of your paper [title, text, heads, etc.] in its style sheet. *\*CRITICAL: Do Not Use Symbols, Special Characters, Footnotes, or Math in Paper Title or Abstract*. (*Abstract*)

Keywords—component, formatting, style, styling, insert (key words)

# Introduction

The most natural way for communication as humans is speech, and there have been constant efforts to make speech a viable and effect way of communication with computing devices, this is achieved with the ever-evolving toolset known as speech to text. These tools constantly evolving as they are , have failed to account for variations in dialects and pronunciation of words along with being available for regional and vernacular languages which varies the impact and effectiveness of these tools from region to region. In this context, it is empirical that we strive to improve these tools to overcome this disparity, making them available to all irrespective of region or language.

In light of the pressing need for these technological tools to be not just widely accessible, but also effectively utilized across diverse regions and languages, this paper puts forth a novel proposition. It suggests the deployment of an on device speech-to-text module that has been localized specifically for the multitude of regional languages spoken across India. The primary objective of this module is not merely to transcribe speech to text, but to serve a greater purpose - to act as a facilitator in the learning process. By catering to the unique linguistic nuances of regional Indian languages, this module aims to bridge the gap between technology and effective learning, thereby making education more inclusive and comprehensive.

Here we strive to implement the following tools to facilitate our goal towards a smart and inclusive classroom :

* Discussion Logs : Leveraging Audio Fingerprinting to keep an individualised, speaker separated log of the class room discussions, which will enable a quick and easy review of the classroom discussions.
* Summarization : Using the discussion logs made, prepare a short summary to assist in quick review.
* Individualised Remainders and Summary : Leveraging the discussion logs to make a personalised summary tailored to the individual comprising of individual assigned tasks and conversations.
* Live Captioning and Translation : Enable Seamless Real Time Captioning and Translation of the classroom to the user’s chosen language.
* Evaluation Aid : Identify the key words used in response to a question and cross referencing it with the expected key words and helping the evaluator during a Viva.

The Scope for the use of this tool is vast and the speech to text module proposed in this paper can be leveraged to assist beyond these tools implemented herein.

##### References

The template will number citations consecutively within brackets [1]. The sentence punctuation follows the bracket [2]. Refer simply to the reference number, as in [3]—do not use “Ref. [3]” or “reference [3]” except at the beginning of a sentence: “Reference [3] was the first ...”

Number footnotes separately in superscripts. Place the actual footnote at the bottom of the column in which it was cited. Do not put footnotes in the abstract or reference list. Use letters for table footnotes.

Unless there are six authors or more give all authors’ names; do not use “et al.”. Papers that have not been published, even if they have been submitted for publication, should be cited as “unpublished” [4]. Papers that have been accepted for publication should be cited as “in press” [5]. Capitalize only the first word in a paper title, except for proper nouns and element symbols.

For papers published in translation journals, please give the English citation first, followed by the original foreign-language citation [6].

1. G. Eason, B. Noble, and I. N. Sneddon, “On certain integrals of Lipschitz-Hankel type involving products of Bessel functions,” Phil. Trans. Roy. Soc. London, vol. A247, pp. 529–551, April 1955. *(references)*
2. J. Clerk Maxwell, A Treatise on Electricity and Magnetism, 3rd ed., vol. 2. Oxford: Clarendon, 1892, pp.68–73.
3. I. S. Jacobs and C. P. Bean, “Fine particles, thin films and exchange anisotropy,” in Magnetism, vol. III, G. T. Rado and H. Suhl, Eds. New York: Academic, 1963, pp. 271–350.
4. K. Elissa, “Title of paper if known,” unpublished.
5. R. Nicole, “Title of paper with only first word capitalized,” J. Name Stand. Abbrev., in press.
6. Y. Yorozu, M. Hirano, K. Oka, and Y. Tagawa, “Electron spectroscopy studies on magneto-optical media and plastic substrate interface,” IEEE Transl. J. Magn. Japan, vol. 2, pp. 740–741, August 1987 [Digests 9th Annual Conf. Magnetics Japan, p. 301, 1982].
7. M. Young, The Technical Writer’s Handbook. Mill Valley, CA: University Science, 1989.

**IEEE conference templates contain guidance text for composing and formatting conference papers. Please ensure that all template text is removed from your conference paper prior to submission to the conference. Failure to remove template text from your paper may result in your paper not being published.**