

# Group:7 Research Paper

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**Abstract**—This document is a model and instructions for L<sup>A</sup>T<sub>E</sub>X. This and the IEEEtran.cls file define the components of your paper [title, text, heads, etc.]. \*CRITICAL: Do Not Use Symbols, Special Characters, Footnotes, or Math in Paper Title or Abstract.

**Index Terms**—component, formatting, style, styling, insert

## I. INTRODUCTION

Bangladesh has faced unprecedented turbulence in 2024. To begin the year with controversy election and in the middle the fled of ruling government and ending the year with interim government. An eventful year we have been through and we have experienced a revolution by students and general people. The media plays a crucial role in geopolitics in putting the global narrative. Al Jazeera, as a leading international news network, provides extensive coverage of Bangladesh, reflecting its socio-political, economic, and cultural developments. In addition to political unrest, 2024 was marked by significant economic struggles exacerbated by natural disasters, including severe flooding and a dengue fever epidemic that strained healthcare resources (The Financial Express, 2024). The economy faced multiple challenges such as rising inflation, a balance of payments deficit, and declining foreign exchange reserves, which were compounded by the impacts of climate change (World Bank, 2024). Furthermore, the ongoing health crisis due to dengue fever added pressure on an already strained healthcare system, highlighting the vulnerabilities within Bangladesh's socio-economic framework (Asian Development Bank, 2024). This research focuses on Bangladesh, a nation experiencing rapid economic growth and navigating a complex political landscape. Analyzing international media coverage of Bangladesh is essential for understanding how global audiences perceive the nation's progress, challenges, and its role in the region. This study examines news articles published by Al Jazeera, a prominent international news network, over the course of 2024 using the df-matrix and LDA also sentiment analysis using LSA techniques.

Identify applicable funding agency here. If none, delete this.

## II. RELATED WORK

Naskar et al. (2016) present Sent LDA, a sentiment analysis framework that leverages topic modeling to identify user sentiments in social networks, specifically Twitter. This framework associates topics with emotions based on Russell's model of affect. Nirob et al. (2017) present a generalized model for analyzing trending topics in Bangla newspapers. Their approach utilizes statistical techniques, including unigrams, bigrams, and trigrams, to extract, visualize, and categorize the most discussed topics over time. Verbytska (2023) used computational models to analyze Western and Eastern media framing of the Russia-Ukraine war, revealing divergent narratives and prioritization of issues like security, defense, resources, and policy. Helal and others (2018) developed a topic modeling approach using Latent Dirichlet Allocation (LDA) to extract topics from a Bangla news corpus and classify news articles accordingly. Grici Ūtė et al. (2023) applied Latent Dirichlet Allocation (LDA) to analyze topic changes in Swedish newspaper articles about the COVID-19 pandemic over a year. Their goal was to understand the societal impact of Swedish government pandemic policies.

## III. RESEARCH METHODOLOGY

### A. Data collection

The dataset for this study comprises news articles collected through web scraping. Each article includes its textual content, publication date, and other relevant metadata. After scraping, the data is stored in a structured CSV format, ensuring easy access and analysis.

### B. Data Preprocessing

- Text Normalization: Converting all text to lowercase to maintain consistency.
- Cleaning and Filtering: Removing punctuation, special characters, and numbers to retain only meaningful words.
- Stop word Removal: Eliminating common words that do not contribute to topic identification, including both



## I. Some Common Mistakes

- The word “data” is plural, not singular.
- The subscript for the permeability of vacuum  $\mu_0$ , and other common scientific constants, is zero with subscript formatting, not a lowercase letter “o”.
- In American English, commas, semicolons, periods, question and exclamation marks are located within quotation marks only when a complete thought or name is cited, such as a title or full quotation. When quotation marks are used, instead of a bold or italic typeface, to highlight a word or phrase, punctuation should appear outside of the quotation marks. A parenthetical phrase or statement at the end of a sentence is punctuated outside of the closing parenthesis (like this). (A parenthetical sentence is punctuated within the parentheses.)
- A graph within a graph is an “inset”, not an “insert”. The word alternatively is preferred to the word “alternately” (unless you really mean something that alternates).
- Do not use the word “essentially” to mean “approximately” or “effectively”.
- In your paper title, if the words “that uses” can accurately replace the word “using”, capitalize the “u”; if not, keep using lower-cased.
- Be aware of the different meanings of the homophones “affect” and “effect”, “complement” and “compliment”, “discreet” and “discrete”, “principal” and “principle”.
- Do not confuse “imply” and “infer”.
- The prefix “non” is not a word; it should be joined to the word it modifies, usually without a hyphen.
- There is no period after the “et” in the Latin abbreviation “et al.”.
- The abbreviation “i.e.” means “that is”, and the abbreviation “e.g.” means “for example”.

An excellent style manual for science writers is [7].

## J. Authors and Affiliations

**The class file is designed for, but not limited to, six authors.** A minimum of one author is required for all conference articles. Author names should be listed starting from left to right and then moving down to the next line. This is the author sequence that will be used in future citations and by indexing services. Names should not be listed in columns nor group by affiliation. Please keep your affiliations as succinct as possible (for example, do not differentiate among departments of the same organization).

## K. Identify the Headings

Headings, or heads, are organizational devices that guide the reader through your paper. There are two types: component heads and text heads.

Component heads identify the different components of your paper and are not topically subordinate to each other. Examples include Acknowledgments and References and, for these, the correct style to use is “Heading 5”. Use “figure caption” for your Figure captions, and “table head” for your table title. Run-in heads, such as “Abstract”, will require you

to apply a style (in this case, italic) in addition to the style provided by the drop down menu to differentiate the head from the text.

Text heads organize the topics on a relational, hierarchical basis. For example, the paper title is the primary text head because all subsequent material relates and elaborates on this one topic. If there are two or more sub-topics, the next level head (uppercase Roman numerals) should be used and, conversely, if there are not at least two sub-topics, then no subheads should be introduced.

## L. Figures and Tables

a) *Positioning Figures and Tables:* Place figures and tables at the top and bottom of columns. Avoid placing them in the middle of columns. Large figures and tables may span across both columns. Figure captions should be below the figures; table heads should appear above the tables. Insert figures and tables after they are cited in the text. Use the abbreviation “Fig. 4”, even at the beginning of a sentence.

TABLE I  
TABLE TYPE STYLES

Table Head	Table Column Head		
	Table column subhead	Subhead	Subhead
copy	More table copy <sup>a</sup>		

<sup>a</sup>Sample of a Table footnote.



Fig. 4. Example of a figure caption.

Figure Labels: Use 8 point Times New Roman for Figure labels. Use words rather than symbols or abbreviations when writing Figure axis labels to avoid confusing the reader. As an example, write the quantity “Magnetization”, or “Magnetization, M”, not just “M”. If including units in the label, present them within parentheses. Do not label axes only with units. In the example, write “Magnetization (A/m)” or “Magnetization {A[m(1)]}”, not just “A/m”. Do not label axes with a ratio of quantities and units. For example, write “Temperature (K)”, not “Temperature/K”.

## ACKNOWLEDGMENT

The preferred spelling of the word “acknowledgment” in America is without an “e” after the “g”. Avoid the stilted expression “one of us (R. B. G.) thanks ...”. Instead, try “R. B. G. thanks...”. Put sponsor acknowledgments in the unnumbered footnote on the first page.

## REFERENCES

Please 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].

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