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i - Ja M C S I I X  
2023

# ABSTRACT BOOK 2023

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INTERNATIONAL JASIN  
MULTIMEDIA AND COMPUTER SCIENCE  
INVENTION AND INNOVATION EXHIBITION

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# **i - J a M C S I I X**

## **2023**

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INVENTION AND INNOVATION EXHIBITION (I-JaMCSIIIX) 2023

# **Virtual Award Ceremony**

**8th November 2023**  
**Wednesday**

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## 2023

INTERNATIONAL JASIN MULTIMEDIA & COMPUTER SCIENCE  
INVENTION AND INNOVATION EXHIBITION (I-JaMCSIIIX) 2023

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# Tomoe : Topic Modelling Web Application

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**Abstract**— Text data is becoming a very valuable asset in digital era in various fields. However, managing and analyzing text data becomes increasingly impossible as information continues to grow. Therefore, NLP methods can be applied. One of the application of NLP is Topic Modeling, which is a method that can find and identify hidden topics in text documents. The method of Topic Modeling that is often used is LDA. LDA is an unattended AI model using a soft fuzzy clustering approach. The assumption built from this model is that the document consists of topics composed of lists of words. Unfortunately in its implementation, doing data analysis with Topic Modeling requires quite a lot of time and deeper learning. So that an AI Web Application was created based on the Topic Modeling method called Tomoe (Topic Modelling Web Application) to facilitate the summarization of text documents. In using this application users do not need to worry about data theft, because this application does not use a database system. The results of the analysis of this application are in the form of an Initial Word Cloud that shows the most frequently appearing words based on their font size, Topics in Text is the result of topic modeling based on the LDA model and Word Cloud from Topics is a visualization of Topics in Text. So that the use of Tomoe can certainly make it easier for users to model topics or see the subject matter of one text document more quickly and easily.

**Keywords**— *Natural Language Preprocessing, Latent Diriclet Allocation, Topic Modeling*



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