

#### **PES UNIVERSITY**

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6th Semester Project Report on

**Context Analyzer** 

Submitted by

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under the guidance of

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FACULTY OF ENGINEERING

DEPARTMENT OF COMPUTER APPLICATIONS

PROGRAM – MASTER OF COMPUTER APPLICATIONS



# FACULTY OF ENGINEERING DEPARTMENT OF COMPUTER APPLICATIONS PROGRAM – MASTER OF COMPUTER APPLICATIONS

#### CERTIFICATE

This is to certify that the project entitled

#### **Context Analyzer**

is a bona fide work carried out by

#### Harsha K Y (PES1201801839)

in partial fulfilment for the completion of 6<sup>th</sup> semester project work in the Program of Study MCA with specialization in Data Science under rules and regulations of PES University, Bengaluru during the period Jan. 2020 – May 2020. The project report has been approved as it satisfies the 6<sup>th</sup> semester academic requirements in respect of project work

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I, Harsha K Y, hereby declare that the project entitled, Context Analyzer, is an original

work done by us under the guidance of Mr. Tamal Dey, Assistant Professor, Department of

Computer Applications, PES University and is being submitted in partial fulfilment of the

requirements for completion of 6th Semester course work in the Program of Study MCA. All

corrections/suggestions indicated for internal assessment have been incorporated in the report.

The plagiarism check has been done for the report and is below the given threshold.

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## **ABSTRACT**

Text classification is an important task in supervised machine learning. A piece of text is assigned to one or more classes or categories. This can be done manually or with the help of powerful machine learning algorithms. The problem with doing this manually is that it takes up a lot of time and resources.

Let's say you own a blogging website or a news website. Every article that is being posted has to be classified and put into a category. Making people read these articles manually is both time consuming and expensive. It would be easier if the computer itself classified these articles, as soon as they are posted. This is where natural language processing comes into play. Natural Language Processing or NLP, is a Machine Learning (ML) task that is used to train an ML model to recognize text data and get meaningful insights from it. This means that a trained ML model will be able to go through some text data and give us some context on it.

So, if you pass an article as input, this model will be able to tell you where it belongs. NLP can also be used to do other interesting tasks such as Sentiment Analysis. This means that a model will be able to tell if some text data is positive, negative, or neutral about any topic that is in discussion. Context Analyzer provides solutions for both of these tasks.