VISVESVARAYA TECHNOLOGICAL UNIVERSITY

JNANA SANGAMA CAMPUS, BELGAVI-590018

PROJECT REPORT

On

"FAKE NEWS DETECTION USING MACHINE LEARNING TECHNIQUES"

Submitted by

AMULYA	4AL16IS002
CHANDANA N S	4AL16IS009
K S VEDA	4AL16IS021
MOULYA M	4AL16IS030

In partial fulfillment of the requirements for the degree of

BACHELOR OF ENGINEERING

In

INFORMATION SCIENCE AND ENGINEERING

Under the Guidance of

Mr. SUDARSHANA K

Senior Assistant Professor

DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY

Moodbidri-574225, Karnataka

2019– 2020

ALVA'S INSTITUTE OF ENGINEERING AND

TECHNOLOGYMIJAR, MOODBIDRI D.K. -574225
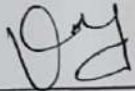
KARNATAKA

ALVA'S
Education Foundation

DEPARTMENT OF INFORMATION SCIENCE AND

ENGINEERING

CERTIFICATE

Certified that the project work entitled "FAKE NEWS DETECTION USING MACHINE LEARNING TECHNIQUES" is a bonafide work carried out by

AMULYA	4AL16IS002
CHANDANA N S	4AL16IS009
K S VEDA	4AL16IS021
MOULYA M	4AL16IS030

in partial fulfilment for the award of BACHELOR OF ENGINEERING in **INFORMATION SCIENCE AND ENGINEERING** of the **VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM** during the year 2019–2020. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the Bachelor of Engineering Degree.

Mr. SUDARSHANA K
Project Guide

Mr. JAYANTKUMAR A. RATHOD
H.O.D.
Dept. Of Information Science & Engineering
Head of the Department
Alva's Institute of Engg. & Technology
Mijar, MOODBIDRI - 574 225

Dr. PETER FERNANDES
PRINCIPAL
Principal
Alva's Institute of Engg. & Technolog
Mijar. MOODBIDRI - 574 225, D.K

Name of the Examiners

Signature with Date

1.

2.

ABSTRACT

Social media for news consumption is a double-edged sword. On the one hand, its low cost, easy access, and rapid dissemination of information lead people to seek out and consume news from social media. On the other hand, it enables the wide spread of "fake news", i.e., low quality news with intentionally false information. The extensive spread of fake news has the potential for extremely negative impacts on individuals and society. Therefore, fake news detection on social media has recently become an emerging research that is attracting tremendous attention. Fake news detection on social media presents unique characteristics and challenges that make existing detection algorithms from traditional news media ineffective or not applicable. First, fake news is intentionally written to mislead readers to believe false information, which makes it difficult and nontrivial to detect based on news content; therefore, we need to include auxiliary information, such as user social engagements on social media, to help make a determination. Second, exploiting this auxiliary information is challenging in and of itself as users' social engagements with fake news produce data that is big, incomplete, unstructured, and noisy. Because the issue of fake news detection on social media is both challenging and relevant. We conduct a set of learning experiments to build accurate fake news detectors, and show that we can achieve accuracies of up to 90%. In addition, we provide comparative analyses of different Natural Language Processing Algorithms like Naïve Bayes, Support Vector Machine, Logistic Regression, and Random Forest.