



**Senior Design Project**  
**Fake Job Posting Detection Using**  
**Machine Learning**

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Fall, 2022

# DECLARATION

This is to certify that this Project is our original work. No part of this work has been submitted elsewhere partially or fully for the award of any other degree or diploma. Any material reproduced in this project has been properly acknowledged.

## Students' name & Signature

1. **Tawfiqul Islam Talukder**

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2. **S.M Shouvik Islam**

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# APPROVAL

The capstone project entitled “**Fake Job Posting Detection Using Machine Learning**” by **Tawfiqul Islam Talukder (ID#1521092042)** and **S.M Shouvik Islam (ID#1712767642)** is approved in partial fulfillment of the requirement of the Degree of Bachelor of Science in Computer Science and Engineering on May and has been accepted as satisfactory.

## Supervisor’s Signature

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**Dr. Mohammad Monirujjaman Khan**

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## Department Chair’s Signature

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## ACKNOWLEDGMENT

First of all, we wish to express our gratitude to the Almighty for giving us the strength to perform our responsibilities and complete the report.

The capstone project program is very helpful to bridge the gap between the theoretical knowledge and real life experience as part of Bachelor of Science (BSc) program. This report has been designed to have a practical experience through the theoretical understanding.

We also acknowledge our profound sense of gratitude to all the teachers who have been instrumental for providing us the technical knowledge and moral support to complete the project with full understanding.

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# ABSTRACT

This report presents the design and the implementation of a system that can detect fake jobs using a machine learning method that employs a variety of categorization algorithms. The COVID-19 epidemic situation has transformed the regular livelihoods of mankind in the world. This epidemic has put excessive pressure on the job market. As a consequence of the epidemic, most organizations have halted their recruiting processes, which has raised the rate of unemployment. Online recruiting has suddenly increased the quantity of applicants while also bridging the distance between recruiters and candidates. It indicates that scammers have emerged in the online recruiting market. They provide extremely high pay ranges or any other type of benefit on several online platforms. It's called "Fake Job Postings." Job seekers are applying for those fake jobs. As a result, scammers steal their personal information. Scammers use their personal information for a variety of cybercrimes or sell it on the dark web. This paper's objective is to identify and verify these job advertisements, whether they're fake or not. To identify these fake job advertisements, Machine Learning Algorithms (MLA) was implemented throughout this study, such as the Random Forest algorithm, and Logistic Regression algorithm. This study trained and tested the dataset and got an accuracy of 98.86 percent in Logistic Regression and 98.54 percent in Random Forest. In the Logistic Regression algorithm, our recommended technique has an accuracy of 98.86 percent, which is a huge improvement over the current methods. The accuracy percentile of both the algorithms used throughout this analysis is substantially in excess of prior studies, showing that the algorithms utilized throughout this analysis are well balanced.