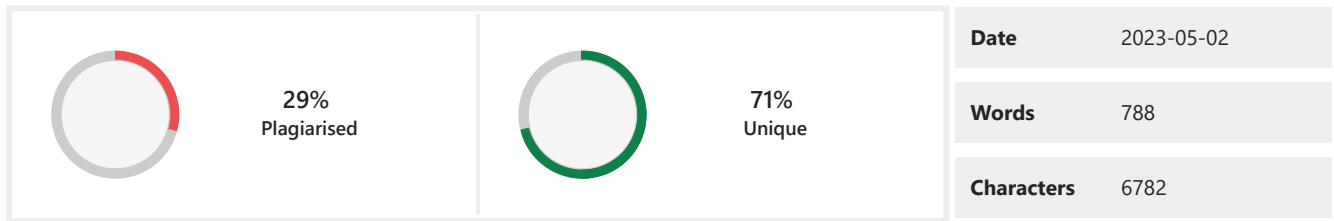


## PLAGIARISM SCAN REPORT



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Tribhuvan University  
Orchid International College

A Final Year Project Report  
On  
ELECTRIC VEHICLE CHARGING STATION RECOMMENDATION SYSTEM USING COLLABORATIVE FILTERING

Under the Supervision of  
Er. Utsab Koirala  
Lecturer  
Orchid International College

Submitted To:  
Orchid International College

**In partial fulfillment of the requirement for the Bachelor Degree in Computer Science and Information Technology**

Submitted By:  
Rajat Budhathoki (20820/075)  
Bipin Chaudhary (20800/075)  
Abhinna Ojha (20788/075)

April, 2023

### SUPERVISOR'S RECOMMENDATION

I hereby recommend that the report prepared under my supervision by Rajat Budhathoki (20820/075), Bipin Chaudhary (20800/075), Abhinna Ojha (20788/075) entitled "Electric Vehicle Charging Station Recommendation System using Collaborative Filtering" **in partial fulfilment of the requirements for the degree of B.Sc. in Computer Science and Information Technology be processed for evaluation.**

.....  
Er. Utsab Koirala  
Lecturer  
Orchid International College  
Bijayachowk, Gaushala

#### CERTIFICATE OF APPROVAL

This is to certify that this project prepared by Rajat Budhathoki (20820/075), Bipin Chaudhary (20800/075), and Abhinna Ojha (20788/075) entitled "Electric Vehicle Charging Station Recommendation System using Collaborative Filtering" in partial fulfilment of the requirements for the degree of B.Sc. in Computer Science and Information Technology has been well studied. In our opinion, it is satisfactory in the scope and quality as a project for the required degree.

-----  
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#### ACKNOWLEDGEMENTS

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were directly or indirectly helpful for the completion of this project.

Rajat Budhathoki (20820/075)

Bipin Chaudhary (20800/075)

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## ABSTRACT

As charging an EV is not as fast and only some charging stations are equipped with fast charging port, EV drivers and owners face a dilemma on whether a certain location even has a charging station or not, and is the charging station is suitable for them or not. This system aims to provide users a web-based platform that can recommend the potentially suitable charging station to them. The system will be developed in Laravel, utilising its capabilities for potent web development and efficient database management. The proposed system provides personalized recommendations to users based on their charging needs and preferences, making it easier for them to find and use charging stations. The results of our evaluation demonstrate the effectiveness and efficiency of the proposed system in recommending charging stations to users.

Keywords: Electric Vehicle (EV), Charging Station, Recommendation System, Cosine Similarity, Weighted Average, Laravel

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