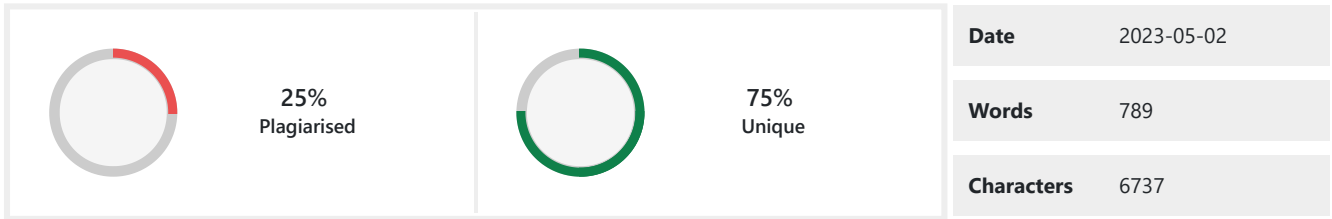


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Tribhuvan University
Orchid International College

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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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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