

**A REPORT  
ON  
PLACE RECOMMENDATION SYSTEM  
USING CREWAI AND OPEN ROUTER**

*Submitted by,*

**Yadhunandhan R - 20211CIT0132**

*Under the guidance of,*

**Mrs. STERLIN MINISH T N**

**Assistant Professor**

*in partial fulfillment for the award of the degree of*

**BACHELOR OF TECHNOLOGY**

**IN**

**COMPUTER SCIENCE AND ENGINEERING,  
INTERNET OF THINGS**

**At**



**PRESIDENCY UNIVERSITY**

**BENGALURU**

**MAY 2025**

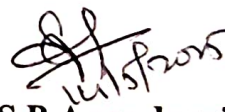
**PRESIDENCY UNIVERSITY**  
**PRESIDENCY SCHOOL OF COMPUTER SCIENCE AND**  
**ENGINEERING**

**CERTIFICATE**

This is to certify that the Internship/Project report “**PLACE RECOMMENDATION SYSTEM USING CREWAI AND OPEN ROUTER**” being submitted by “**YADHUNANDHAN R**” bearing roll number “**20211CIT0132**” in partial fulfillment of the requirement for the award of the degree of Bachelor of Technology in Computer Science and Engineering is a bonafide work carried out under my supervision.



**Mrs. STERLIN MINISH,**  
Assistant Professor,  
School of CSE,  
Presidency University.



**Dr. S P Anandaraj**  
Professor & HoD  
PSCS  
Presidency University



**Dr. MYDHILI NAIR**  
Associate Dean  
PSCS  
Presidency University



**Dr. SAMEERUDDIN KHAN**  
Pro-Vice Chancellor - Engineering  
Dean -PSCS / PSIS  
Presidency University

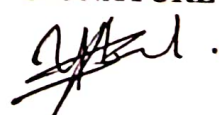
# **PRESIDENCY UNIVERSITY**

## **PRESIDENCY SCHOOL OF COMPUTER SCIENCE AND ENGINEERING**

### **DECLARATION**

I hereby declare that the work, which is being presented in the report entitled “**PLACE RECOMMENDATION SYSTEM USING CREWAI AND OPEN ROUTER**” in partial fulfillment for the award of Degree of **Bachelor of Technology in Computer Science and Engineering**, is a record of my own investigations carried under the guidance of **Mrs Sterlin Minish T N, Presidency School of Computer Science and Engineering, Presidency University, Bengaluru.**

I have not submitted the matter presented in this report anywhere for the award of any other Degree.

<b>S.NO</b>	<b>NAME</b>	<b>ROLL NO</b>	<b>SIGNATURE</b>
1.	YADHUNANDHAN R	20211CIT0132	

# INTERNSHIP COMPLETION CERTIFICATE



## CERTIFICATE OF INTERNSHIP

This is to certify that **Mr. Yadhunandhan R** has successfully completed his internship at **Kloc Technologies Pvt. Ltd.** from **February 1, 2025 to April 30, 2025**, in the role of **Python Developer**.

During his internship tenure, he demonstrated commendable dedication, a strong work ethic, and a sincere approach to learning and contributing to the assigned projects. His performance was consistent and met the professional standards expected at our organization.

We appreciate his efforts and wish him all the very best in his future endeavors.

Yours truly,

For Kloc Technologies Pvt. Ltd.

*Sushma V Charantimath*

**Sushma V Charantimath**

HR Executive

---



## ABSTRACT

This project introduces an intelligent Travel Recommender System that generates personalized, real-time travel recommendations through LLMs, multi-agent orchestration, and web scraping. This system can interpret natural language user queries, extract group intent, and generate recommendations based on the user's intricate travel preferences.

The system is based on a multi-agent architecture scripted through the CrewAI framework based agent manager. There are two essential agents that participate in the pipeline; the Travel Analyzer Agent, that can take user input and extract structured parameters like location, ambiance, and venue type, and the Place Recommender Agent, that uses the parameters to then retrieve real-time web information using a custom scraping module. The modular agent pipeline allows for separation of tasks and concurrent execution.

The architecture supports prompt engineering and tool chaining performed through LangChain so that agents may use external tools, like `scrape_website()` allowing agents to directly access the web while performing reasoning. OpenRouter routes query requests to a LLM engine, like GPT-3.5-turbo, that is used for semantic parsing of user input and producing fluent descriptive responses that resemble human responses.

The robust dynamic scraper starts from a travel blog and directory site, gathering live information from real-time travel bloggers and aggregators and returning recommendations for places to visit that will reflect the latest trends and availability. Each recommendation is provided with place name, type, description, rationale, and GPS coordinates. By combining language understanding, agent-based abstractions, and live information from the web, this system offers a flexible and intelligent pipeline for modern travel recommender application.

## ACKNOWLEDGEMENT

First of all, I am indebted to the **GOD ALMIGHTY** for giving me an opportunity to excel in my efforts to complete this project on time.

I express my sincere thanks to our respected dean **Dr. Md. Sameeruddin Khan**, Pro-VC - Engineering and Dean, Presidency School of Computer Science and Engineering & Presidency School of Information Science, Presidency University for getting me permission to undergo the internship.

I express my heartfelt gratitude to our beloved Associate Dean **Dr. Mydhili Nair**, Presidency School of Computer Science and Engineering, Presidency University, and **Dr. S P Anandaraj**, Head of the Department, Presidency School of Computer Science and Engineering, Presidency University, for rendering timely help in completing this internship successfully.

I am greatly indebted to my guide **Mrs Sterlin Minish T N**, Associate Prof. and Reviewer **Dr. Anandraj S P**, Head of the Department, Presidency School of Computer Science and Engineering, Presidency University for her/his inspirational guidance, and valuable suggestions and for providing me a chance to express my technical capabilities in every respect for the completion of the internship work.

I would like to convey my gratitude and heartfelt thanks to the PIP4004 Internship/University Project Coordinator **Mr. Md Ziaur Rahman** and **Dr. Sampath A K**, department Project Coordinators **Dr. Sharmasth Vali Y** and Git hub coordinator **Mr. Muthuraj**.

I thank my family and friends for the strong support and inspiration they have provided me in bringing out this project.

**Yadhunandhan R**