



PRESIDENCY UNIVERSITY

Private University Estd. in Karnataka State by Act No. 41 of 2013
Itgalpura, Rajankunte, Yelahanka, Bengaluru – 560064



Smart Multilingual Chatbot for PGRKAM Platform

A PROJECT REPORT

Submitted by

PRAJWAL A - 20221CSE0355

SHREE SAI PAVAN E - 20221CSE0458

SRUJAN S - 20221CSE0457

Under the guidance of,

Ms. Tintu Vijayan

BACHELOR OF TECHNOLOGY

IN

COMPUTER SCIENCE AND ENGINEERING

PRESIDENCY UNIVERSITY

BENGALURU

DECEMBER 2025



PRESIDENCY UNIVERSITY

Private University Estd. in Karnataka State by Act No. 41 of 2013
Italgapura, Rajankunte, Yelahanka Bengaluru - 560064



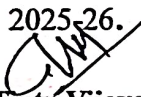
PRESIDENCY SCHOOL OF COMPUTER SCIENCE AND ENGINEERING

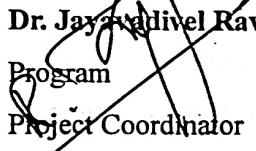
BONAFIDE CERTIFICATE


Certified that this report "Smart Multilingual Chatbot for PGRKAM Platform" is Bonafide work of "PRAJWAL A ID: 20221CSE0355, SHREE SAI PAVAN E ID: 20221CSE0458,


SRUJAN S ID: 20221CSE0457", who have successfully carried out the project work and submitted the report for partial fulfilment of the requirements for the award of the degree of BACHELOR OF TECHNOLOGY in COMPUTER SCIENCE ENGINEERING during


2025-26.



Ms. Tintu Vijayan
Project Guide
PSCS
Presidency University


Dr. Jayadivel Ravi
Program
Project Coordinator
PSCS
Presidency University

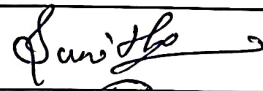


Dr. Sampath A K
Dr. Geetha A
School Project
Coordinators
PSCS
Presidency University


Dr. Asif Mohamed H B
Head of the Department
PSCS
Presidency University


Dr. Shakkeera L
Associate Dean
PSCS
Presidency University


Dr. Duraisundar N
Dean
PSCS & PSIS
Presidency University

Examiners

Sl. no.	Name	Signature	Date
1	Ms. SUNITA B.J		4/12/25
2	Dr. Sreedatha PK		04/12/2025

ACKNOWLEDGEMENT

PRESIDENCY UNIVERSITY

**PRESIDENCY SCHOOL OF COMPUTER SCIENCE AND
ENGINEERING**

DECLARATION

We the students of final year B-Tech in COMPUTER SCIENCE ENGINEERING at Presidency University, Bengaluru, named SHREE SAI PAVAN E ID: 20221CSE0458, PRAJWAL A ID: 20221CSE0355, SRUJAN S ID: 20221CSE0457, hereby declare that the project work titled “Smart Multilingual Chatbot for PGRKAM Platform” has been independently carried out by us and submitted in partial fulfilment for the award of the degree of B-Tech in COMPUTER SCIENCE ENGINEERING during the academic year of 2025-26.

PRAJWAL A	20221CSE0355	Prajwal, A
SHREE SAI PAVAN E	20221CSE0458	Shree Sai Pavan . E
SRUJAN S	20221CSE0457	Srujan S

PLACE: BENGALURU

DATE: 04-12-2025

We are also grateful to the Teaching and Non-Teaching staff of the Department of Computer Science and Engineering, and also staff from other departments who have extended their valuable help and cooperation.

PRAJWAL A

SHREE SAI PAVAN E

SRUJAN S

Table of Contents

The PGRKAM (Punjab Ghar Ghar Rozgar and Karobar Mission) platform serves as an essential resource for employment facilitation in Punjab, connecting job seekers with opportunities provided by the state government. The much-needed analytics is missing in the PGRKAM platform that significantly depends on it to demonstrate user behavior and platform performance.

The project is the answer to this problem and an innovation of a complex analytics tool related to the PGRKAM web and Android applications. The technique was to survey the finer user-event data, including page interactions, referral to the adverts, and demographic profile. The system provides individual job suggestions using machine learning algorithms (Collaborative Filtering and Genetic Algorithms). The data is processed and presented through interactive dashboards, simultaneously, allowing the officials to make a decision supported by data so that to boost the number of users and employment rates.

PGRKAM analytics tool was integrated and tried on the local network of PGRKAM, which demonstrates better insights and real-time monitoring capacity. There were security measures in place to ensure that the data was handled in line with privacy laws. The results indicate that the platform can become an excellent tool in the specific employment services where the fit of skill and opportunity by job seekers is maximized. The project also aligns with the SDGs in that it will lead to sustained, inclusive and sustainable economic growth, full and productive employment as well as decent work to all.

4.	Project Management	
	4.1 Project Timeline	
	4.2 Risk Analysis	
	4.3 Project Budget	
5.	Analysis and Design	
	5.1 Requirements	
	5.2 Block Diagram	
	5.3 System Flow Chart	
	5.4 Choosing devices	
	5.5 Designing units	