# AgroAssist: "Empowering Farmers with Chatbot Technology"

**A PROJECT REPORT**

***Submitted by,***

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*Under the guidance of,*

**Ms. MOUNIKA SREEPERUMBUDURU**

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

**BACHELOR OF TECHNOLOGY**

**IN**

**COMPUTER SCIENCE AND ENGINEERING(INTERNET OF THINGS)**

**At**

GAIN MORE KNOWLEDGE
REACH GREATER HEIGHTS

**PRESIDENCY UNIVERSITY**

**BENGALURU**

**JANUARY 2024**

## PRESIDENCY UNIVERSITY

## SCHOOL OF COMPUTER SCIENCE ENGINEERING

## CERTIFICATE

This is to certify that the Project report **"AgroAssist: Empowering Farmers with Chatbot Technology"** being submitted by "Shaik Mohammed Ibrahim, Sharika Sudhir, Shaik Mansoor, Pranav Sai K" bearing roll number(s) "20201CIT0010, 20201CIT0017, 20201CIT0044, 20201CIT0051" in partial fulfilment of requirement for the award of degree of Bachelor of Technology in Computer Science and Engineering (IoT) is a bonafide work carried out under my supervision.

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## DECLARATION

We hereby declare that the work, which is being presented in the project report entitled **AgroAssist: "Empowering Farmers with Chatbot Technology"** in partial fulfilment for the award of Degree of **Bachelor of Technology** in **Computer Science and Engineering (IoT)**, is a record of our own investigations carried under the guidance of **Ms. Mounika S, Assistant Professor, School of Computer Science Engineering, Presidency University, Bengaluru.**

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

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# ABSTRACT

Modern agriculture faces multifaceted challenges, ranging from financial uncertainties to market complexities, requiring innovative solutions to empower farmers and enhance productivity. This project introduces "AgroAssist" a pioneering chatbot technology tailored to meet the specific needs of farmers. AgroAssist leverages advanced natural language processing (NLP) algorithms and machine learning capabilities to provide personalized assistance, real-time information, and community support to farmers. In this project, we explain the design and working of a chatbot that is specifically tailored to yield appropriate answers for government scheme related queries. The chatbot takes the questions from the user, analyses them, and provides the best answer to the user. This chatbot saves time and helps farmers from going directly to the banks just for enquiries and other government institutes to enquire about the various schemes. The chatbot is developed using a general-purpose programming language, python, and open-source software libraries generally used in Machine Learning. It uses the concepts of Natural Language Processing, Neural Networks, etc., for the chatbot making and concepts of JavaScript, CSS, React js. for a very simple, clear and user-friendly frontend interface. Flask and Socket.io concepts are used for the server connections and interactive responses. A stand-out feature of chatbot responses in multiple local languages like Kannada, Hindi, Tamil, Telugu, etc., is included. The main objective of this chatbot is to check for availability of loans according to the training data and provide the correct loan names along with the official link to the website of the provider- a bank, government agency or organizations or even corporate and small finance banks.

## ACKNOWLEDGEMENT

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**Shaik Mansoor**

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