

V r a j K o t w a l a
J a y a t i G o s w a m i
E b e n e z e r I s a a c

I42, I43, I43

Roll Number: 82, 18, 13

Interns at Rishabh Software Pvt. Ltd.



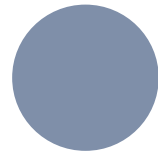
Internship Domain

AI and Machine Learning



Company Profile

- Over 19 years of experience in software development.
- Successfully executed over 1000+ projects globally across 300+ clients



Rishabh Software Pvt. Ltd.

Rishabh Software provides web, mobile and cloud development services, business process services and engineering services.

With their offices across the US (Silicon Valley), UK (London) and India (Vadodara), they help their global clients with high quality and well-executed application development, BPO and Engineering services.

[Address](#): Plot 66, Padra Road, beside Sigil India, Atladara

Internship Details

01 Time Period

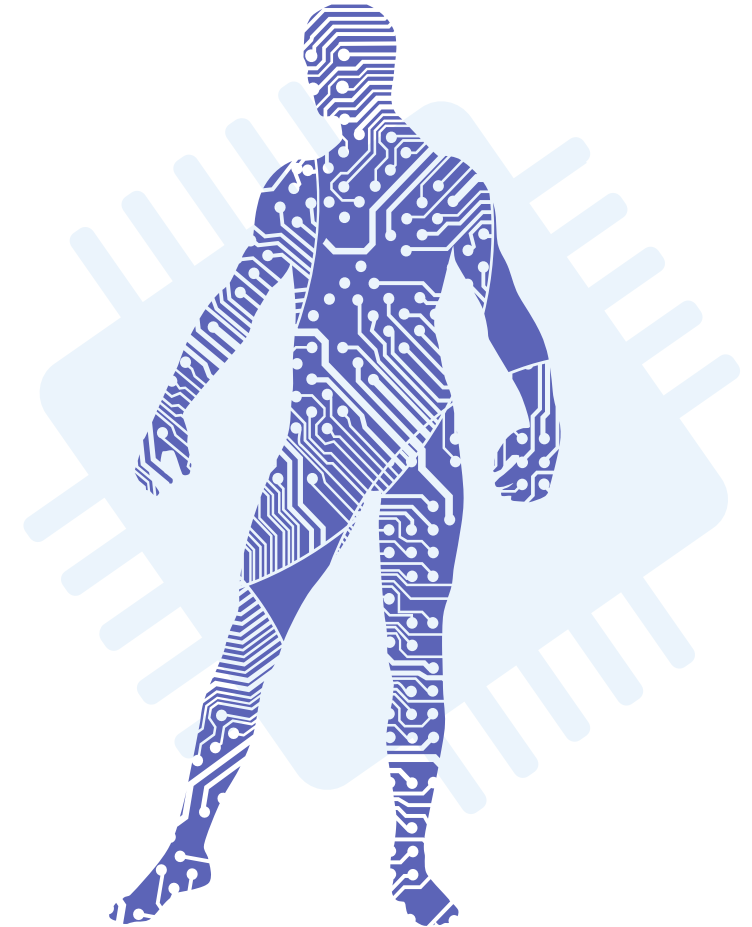
January 6th 2019 to April End.

02 Domain

Artificial Intelligence and Machine Learning.

03 Programming Language

Python





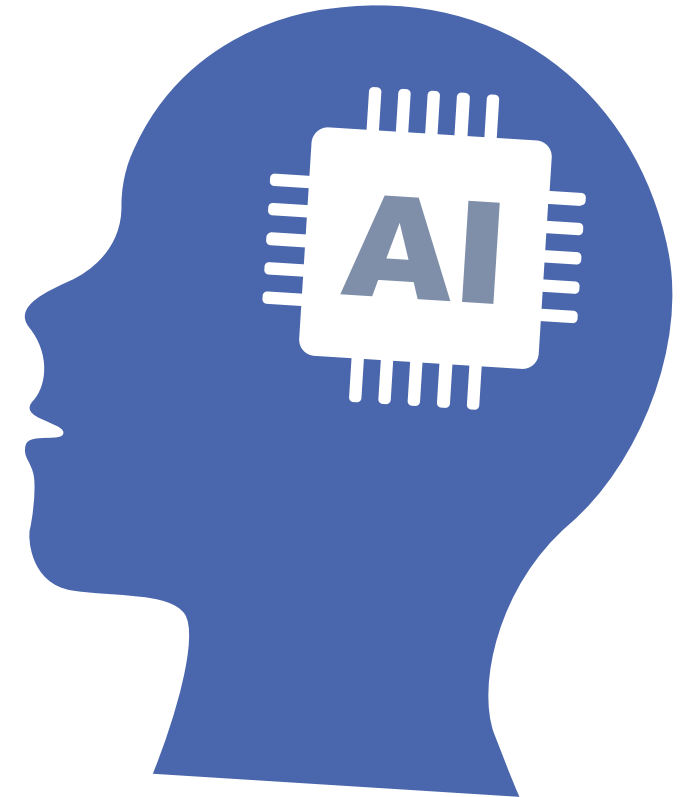
Project Definition - Chatbot

To make a retrieval based Chatbot using NLTK and Keras in python, using a special recurrent neural network (LSTM). Also, using Tkinter for easy user interaction.

SCOPE

Chatbot for Rishabh Software Pvt. Ltd.

1. **About** Rishabh Software
2. **Careers** at Rishabh Software
3. Information about becoming partner with company
4. **Client** Information
5. Testimonials
6. Blog details and links
7. Technologies used at Rishabh Software.
8. Solving **Client Queries**.
9. **Services** at Rishabh Software
 - Retail Software
 - Education Software
 - Logistics and supply chain Software
 - Healthcare Software
 - Finance software
10. **Contact Us** and social media links
11. Details about **RISE**, Rishabh internship division.



Modules

- Retail Software
- Education Software
- Logistics and supply chain Software
- Healthcare Software
- Finance software

Files

Intents.json – The data file having predefined patterns and responses.

train_chatbot.py – Python file containing a script to build the model and train chat bot.

Words.pkl – A pickle file in which the words are stored as Python object, that contains a list of chat bot vocabulary.

Classes.pkl – The classes pickle file contains the list of categories.

Chatbot_model.h5 – This is the trained model that contains information about the model and has weights of the neurons.

Chatgui.py – This is the Python script in which GUI is implemented the chat bot. So that users can easily interact with the bot.



Tools and Technologies Used



Python

Python 3 as a programming language.



JSON

The data file having predefined patterns and responses.

Pickle, NLTK, Keras, LSTM

- Python **library** for storing python objects
- **NLTK**
- **Keras** to form deep learning networks.
- **LSTM** – Long Short Term Memory



Tkinter for GUI
GUI for easy user interaction.



Tentative work distribution

January

Requirement Gathering and planning

Gather requirements.
Create data file and preprocess
data

March

Coding

Develop Chatbot and
predict the response.

April end

Deploying

Deploy the chat bot.

February

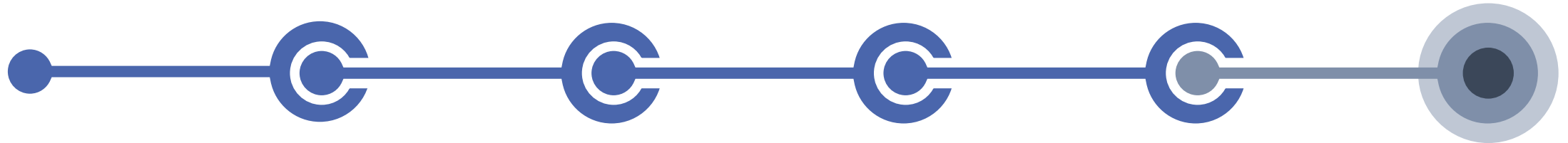
Modelling and training data

Build the model and
Create training and testing data.

April

Testing

Test the Chatbot





Thank You