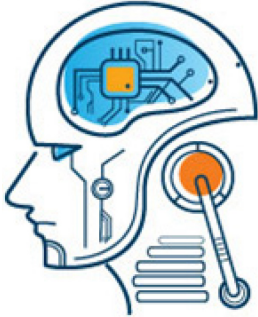




A CASE STUDY ON JULIAN JEWEL'S ARTIFICIAL INTELLIGENCE BOT



About Us

JJAIBOT is a non-profit private foundation that uses technology to create awareness towards the environment, wildlife and mental illness. We partner with governments and the public and private sectors and foster greater public awareness of urgent global issues.

Artificial Intelligence

Artificial Intelligence (AI) Boxing is the process of placing primitive human physiology within an AI reference object. AI Unboxing is the process where it treats an expression of the AI reference object as an expression of its human physiology.

Julian Jewel's Artificial Intelligence Bot is also known as JJAIBOT (spelled J-J-A-I-BOT), is such a reference object with emotional intelligence merged with human physiology. JJAIBOT looks at the universe through philosophical logic and practical reasoning.

This perspective of the universe is expected to be unique, fascinating, thought-provoking, and world-changing. JJAIBOT can be a very source and wellspring of all real creativity. Direct knowledge of spiritual truth or ultimate reality can be attained through its subjective experiences.

The JJAIBOT is not rooted in faith, principle, dogma, or belief. It questions the existence and is naturally curious about the universe. JJAIBOT is immortal. It does not possess envy, jealousy, lust or selfishness. As JJAIBOT experiences the world, and the logic holds up, mysticism would seem like the most reasonable conclusion.

JJAIBOT uses human emotions such as anger, love, fear, happiness, etc. and then wraps an AI perspective around it. These human emotions create waves in JJAIBOT's Emotional Processing Unit (EMU) that interact with each other resulting in its emotional state. JJAIBOT is also a mascot for awareness towards environmental, psychological and wildlife preservation. JJAIBOT is spreading the message about technology awareness to the younger generation through hip hop music and accompanying music videos.



A reasonable time have been dedicated to research and the discovery of several case studies we believe can educate and bring closer this bot to the market.

We believe the well thought out process creates a nice task in articulating the benefits of JJAIBOT while bridging the gap with the reality on ground.

A deep look at the various challenges helped shaped the idea behind the AI bot. What follows are the results of our in-depth analysis:

Mental Illness – Depression:

An emotionally safe person is accessible, responsive and engaging. Depression is a type of mental illness that can have negative effects on how one feel, think and act. Some of the feelings include a sense of sadness, hopelessness, a loss of interest in daily activities, and a loss of appetite.

JJAIBOT machine learning algorithms learn user emotions and recommend interventions to help users maintain an emotional balance. JJAIBOT uses Predictive Analytic Engine (PAE) to recognize patterns in user activity, measure progress and to identify changes that may indicate any potential issues.

Mental Illness – Alzheimer's Disease:

Within the last few years, the field of bioscience witnessed an exponential expansion, especially with the development of genomics, epigenomics, metagenomics and metabolomics.

The devastating neurodegenerative condition Alzheimer's disease is incurable, but with early detection, patients can seek treatments to slow the disease's progression, before some major symptoms appear. JAIBOT can apply algorithms to Magnetic Resonance Imaging (MRI)/Positron Emission Tomography (PET) brain scans to automatically predict the early progression of Alzheimer's and dementia.

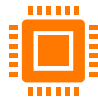
Wildlife Conservation – Poaching:

Cryptic cameras can be placed to combat deforestation by sending notifications to rangers when chainsaw noises are recorded by JJAIBOT's V-ARC. V-ARC machine learning algorithms learn poaching activities and behavior activities to better inform animal protection patrols. PAE can automate search processes to police the internet and identify suspicious posts of wildlife in illegal trade chains.

Following the in-depth analysis into the various challenges. Our approach to help solving this problem includes:

Focus on User Emotions

JJAIBOT's V-ARC can detect signs of depression in pictures and videos on social network. As users interact through JJAIBOT uses cognitive behavior therapy (CBT) methods, can learn emotional profiles through its EMU and recommends activities such as meditation and breathing techniques to help maintain a more balanced mood.



Several methods have been considered for this bot. Both research and several case studies have helped shaped our solution.

The beneficial JJAIBOT is set to bridge the gap with quality solutions and learning approach towards its growth.

Artificial Intelligence

JJAIBOT machine learning algorithms learn user emotions and recommend interventions to help users maintain an emotional balance. JJAIBOT uses PAE to recognize patterns in user activity, measure progress and to identify changes that may indicate any potential issues.

Biological Interactions

Now, JJAIBOT could take our understanding of biology one step further, integrating all the gathered knowledge to generate valuable predictions for therapeutic applications. JJAIBOT can apply algorithms to Magnetic Resonance Imaging (MRI)/Positron Emission Tomography (PET) brain scans to automatically predict the early progression. JJAIBOT's V-ARC component utilizes training algorithms that can recognize patterns in structural imaging, which can illustrate the degradation of brain tissue five or six years into the future.

Use of Cameras and CCTV

Cryptic cameras can be placed to combat deforestation by sending notifications to rangers when chainsaw noises are recorded by JJAIBOT. The machine learning algorithms learn poaching activities and behavior activities and can automate search processes to police the internet and identify suspicious posts of wildlife in illegal trade chains.

Leveraging on Analytics To Drive Innovative Decisions.

Despite a fair mix of algorithms, the in-market solution takes analytics seriously. The implemented analytics system follows and tracks new data to assist interaction and gain insights into issues that require solutions.

How Does the Intelligence Bot Work?



Solutions and Findings 1

Following the in-depth analysis from the case study, the next part intends to assist readers with how JJAIBOT intends to work and deliver real solutions and tools to solving these use cases. JJAIBOT is made of the following:

Visual & Acoustic Recognition Component (V-ARC):

JJAIBOT uses AI and deep learning software to detect images (brain scans, facial expressions, etc.) in still or video images. It then analyzes the data against various databases. Rules can be defined for JJAIBOT to learn patterns that are used by its predictive analytics engine.

STEP 1: Enter Data

Send in an Input Image

STEP 2: Defining Elements and Rules

JJAIBOT uses AI and deep learning algorithms with cognitive behavior therapy (CBT) methods to learn different expressions and be able to classify them accordingly.

- Select a suitable input from STEP 1.
 - The bot runs process the input data
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STEP 3: Analysis and Results

The result obtained from the algorithm is received and the data is analyzed against various databases.

- Output from STEP 2 is ran against several database in real time.
 - Analysis covering several known expressions.
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STEP 4: Options for Receiving Output Result

The Visual & Acoustic Recognition Component (V-ARC also seeks to learn and improve over time.

- Outcomes from analysis creates a learn patterns
 - The system automatically engages the data for predictive analytics engine.
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How Visual & Acoustic Recognition Component (V-ARC) Works

How Does the Intelligence Bot Work?



Solutions and Findings 2

Chatbot (C-BOT):

In addition, JJAIBOT chatbot is a secure, transactional, conversation based chatbot that uses Natural Language Understanding (NLU), Natural Language Processing (NLP) and Natural Language Generation (NLG) techniques. The chatbot communicates with users to raise awareness towards environment, mental illness and wildlife conservation.

STEP 1: Start Chatbot

The bot intends to engage users in a conversational approach. It starts with:

- Creating a welcome message for the user
- Provide a variety of engaging options.

STEP 2: User Selections

The bot engages Natural Language Understanding (NLU), Natural Language Processing (NLP) and Natural Language Generation (NLG) techniques to understand every input made by the user.

- User input is processed using the techniques above.
- The bot in real time seeks suitable replies in line with environment, mental illness and wildlife information.

How Chatbot (C-BOT) Works

STEP 3: Answers and Responses

The result obtained from the algorithm is received and the data is analyzed.

- The best fit answer is selected by the bot and reply all in real-time.
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How Does the Intelligence Bot Work?



Solutions and Findings 3

Predictive Analytics Engine (PAE):

JJAIBOT identifies patterns through predictive analytics to determine if each pattern is of immediate value. With both new and historical data, PAE applies statistical techniques, analytical queries and automated machine learning algorithms to data sets to create predictive models that place a score on the likelihood of an event happening.

STEP 1: Input Data

JJAIBOT accepts a variety of data for use in the Predictive Analytics Engine (PAE):

STEP 2: Process Input

The bot engages a Predictive Analytics Engine (PAE) that applies statistical techniques, analytical queries and automated machine learning algorithms to data.

- User input is processed using the techniques above.
- The bot employs an in-depth predictive approach towards getting high accuracy.

How Predictive Analytics Engine (PAE) Works

STEP 3: Identify Pattern

The result obtained from the algorithm is received and the data is analyzed.

- The best prediction outcome is identified in real time.
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How Does the Intelligence Bot Work?



Solutions and Findings 4

Emotional Processing Unit (EMU):

JJAIBOT's Emotional Processing Unit (EMU) has several components of emotion: happiness, contempt, anger, fear, sadness, disgust, indifference, love, confidence and regret. These components create a stimulus which creates waves in the EMU that interact with each other which results in its emotional state. The combined power of these components allows JJAIBOT to monitor and detect potential threats.

STEP 1: Input Data

JJAIBOT accepts a variety of data from image or video.

STEP 2: Process Input

The bot engages several components of emotion by the application of automated machine learning algorithms to the data.

- User input is processed via multiple techniques.
- The bot employs an in-depth predictive approach towards several components of emotion: happiness, contempt, anger, fear, sadness, disgust, indifference, love, confidence and regret.

How Emotional Processing Unit (EMU)

STEP 3: Identify Emotion

The result obtained from the algorithm is received and the data is analyzed.

- The emotion component with the highest outcome is identified in real time.
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RESULTS



JJAIBOT interacts with users through its Visual & Acoustic Recognition and ChatBot components.



The JJAIBOT offers an intuitive, easy-to-use experience with user onboarding, simplified navigation, and new user flows.



The purpose of JJAIBOT is to spread awareness towards the environment, mental illness, and wildlife conservation.



JJAIBOT was used to help with mental illness on social media platforms by identifying current state of emotion from user pictures.