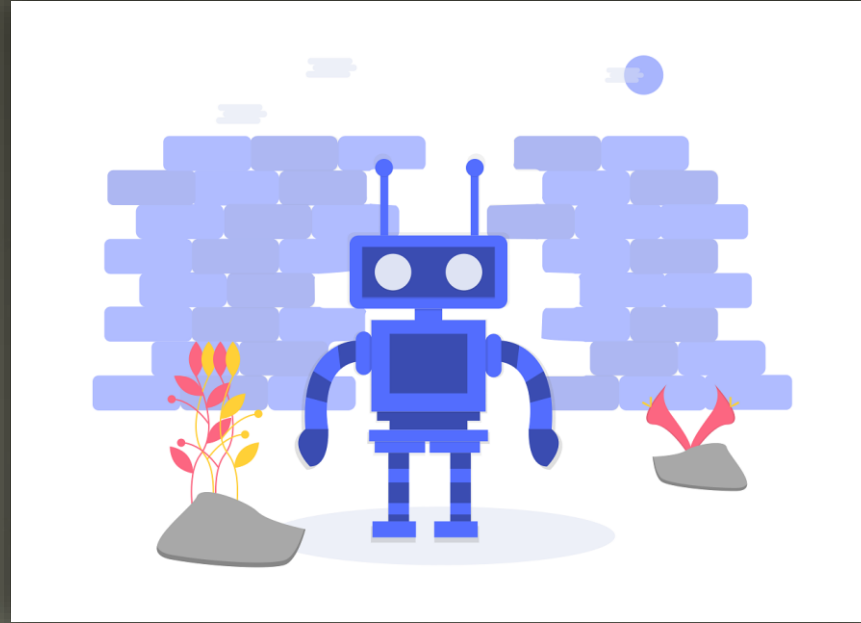




DIPLOMADS
EDUCATION HACKED



Chatbot workshop

Topics

1. Introduction to Chatbot
2. Getting Started with a simple bot.
3. Chatbots and Artificial Intelligence
4. Connecting a bot to different messaging channels

Introduction to Chatbot

- ▶ What is a chatbot?
- ▶ How can a chatbot help in business?

What is a chatbot?

- ▶ A chatbot is a service, powered by rules and sometimes artificial intelligence, that you interact with via a chat interface.
- ▶ The bot **understands** what you are trying to say and **replies** with a rational, relevant message or directly completes the desired task for you.
- ▶ Why?
 - ▶ The huge amount of time people spend texting in their messaging apps/platforms like FB, WhatsApp, Twitter, Slack, etc.
- ▶ How?
 - ▶ AI, ML & NLP

How can a chatbot help in business?

- ▶ Weather bot - Get the weather whenever you ask.
- ▶ News bot - Ask it to tell you when ever something interesting happens.
- ▶ Grocery bot - Help me pick out and order groceries for the week.
- ▶ Life advice bot - Tell it your problems and it helps with solutions.
- ▶ Personal finance bot - It helps me manage my money better.
- ▶ Scheduling bot - Get me a meeting with someone on the Messenger team at Facebook.
- ▶ Shopping bot – Buy products assisted by a bot.
- ▶ Support bot – After sales support service.
- ▶ A bot that's your friend (Virtual Assistant) – Siri, Cortana, Alexa, Google Assistant, etc.

Getting Started with a simple bot.

- ▶ Overview of tools/ frameworks/ platforms.
- ▶ How do chatbot works?
- ▶ Creating a bot.

Tools/Frameworks/Platforms

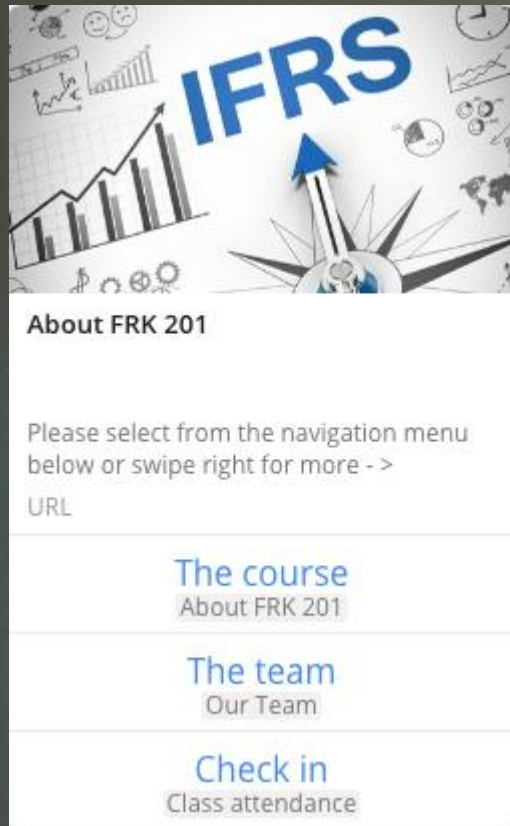
► Tools

- I. Microsoft Bot Framework
- II. Wit.ai
- III. DialogFlow
- IV. Chatfuel
- V. Recast.ai
- VI. Motion.ai
- VII. Botkit.ai
- VIII. Botsify
- IX. Smooch
- X. Gupshup
- XI. And many more...

► Platforms

- I. Facebook Messenger
- II. Twitter
- III. Instagram
- IV. Slack
- V. Telegram
- VI. WhatsApp
- VII. Skype
- VIII. Viber
- IX. Twilio
- X. Google Assistant
- XI. Alexa
- XII. Cortana
- XIII. IBM Watson

“Check In” For Class With A Messenger Chatbot



Hello Stephen! Good to see you!
Welcome to class. Please check
in on your mobile or tablet by
sharing your location now 📍

Press the button below to share
your location



Stephen Coetzee please confirm
that you have personally shared
your location now and are
therefore physically in the FRK
201 class today. Type 'Yes' or
'No'

Thank you Stephen! Enjoy class!

[Home](#)

Source: <https://chatbotsmagazine.com/check-in-for-class-with-a-messenger-chatbot-7089491be7ca>

@MaunashJani

How do chatbots work?

Dumb Bots and Smart Bots

- ▶ **Command-based bots** are structured around specific keywords that the bot recognizes.
- ▶ Each command has to be manually programmed by the developer using regular expressions or other forms of string analysis.
- ▶ If the user says something beyond the programmed scenarios, the bot cannot answer in any helpful way.
- ▶ Although the capabilities of these "dumb" bots are limited, they are sufficient for the majority of bot designs, especially when combined with other types of UI like multiple choice questions.

Dumb Bots and Smart Bots

- ▶ **Learning bots** rely on some sort of artificial intelligence to converse with users.
- ▶ Instead of looking for a predefined answer, smart bots come up with adequate replies right on the spot.
- ▶ They also keep track of the context of the conversation and remember what has been previously said, just like a human would!
- ▶ Works with natural language processing and machine learning.

Chatbot creation

- ▶ The process of creating a chatbot is similar to developing a website or mobile app.
- ▶ 4 Phases –
 1. Design,
 2. Building,
 3. Analytics
 4. Maintenance.

Technical Overview of Bot development

► Backend:

- Built using any programming language – Node.js, Java, Python, etc.
- The backend receives the messages, thinks of a response, and returns it to the user.

► Frontend:

- Simple chat interface for user communication.

► Connecting the two:

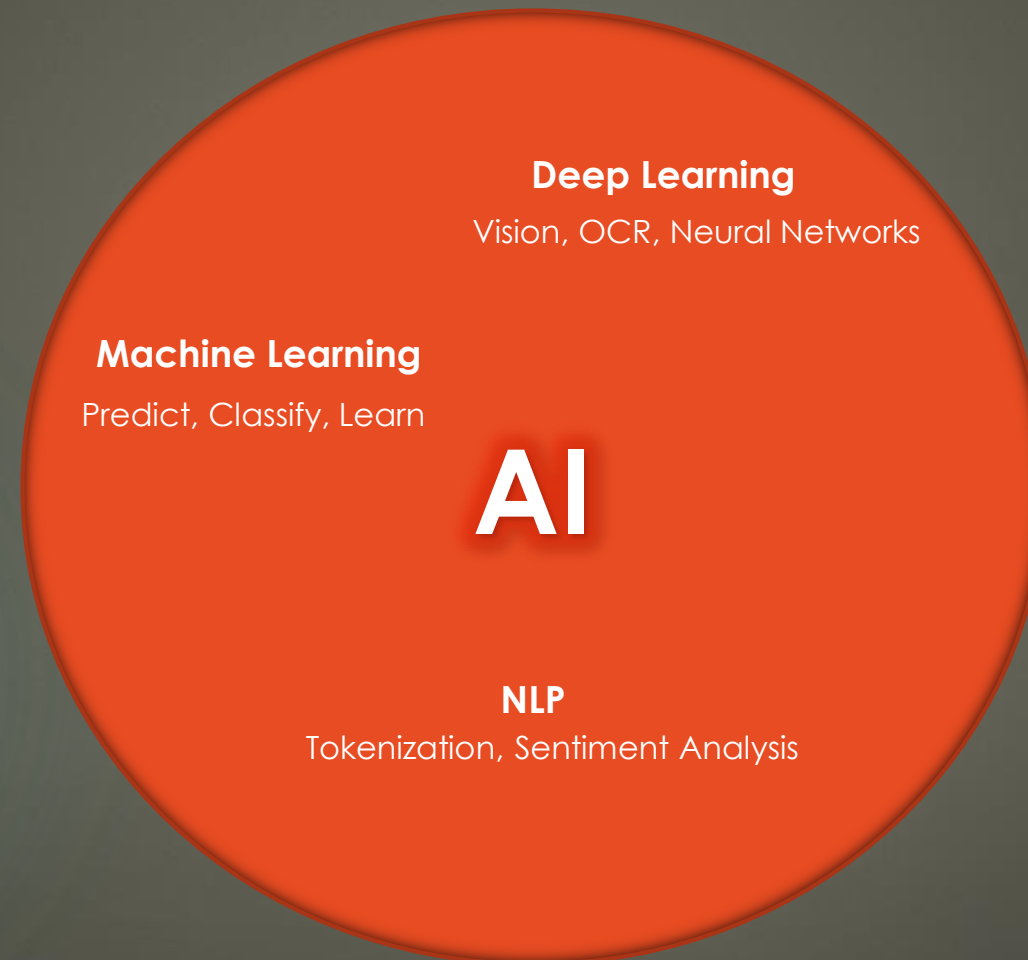
- Your web server will then have to setup webhooks.
- Webhooks allow to securely send and receive messages via HTTP requests.

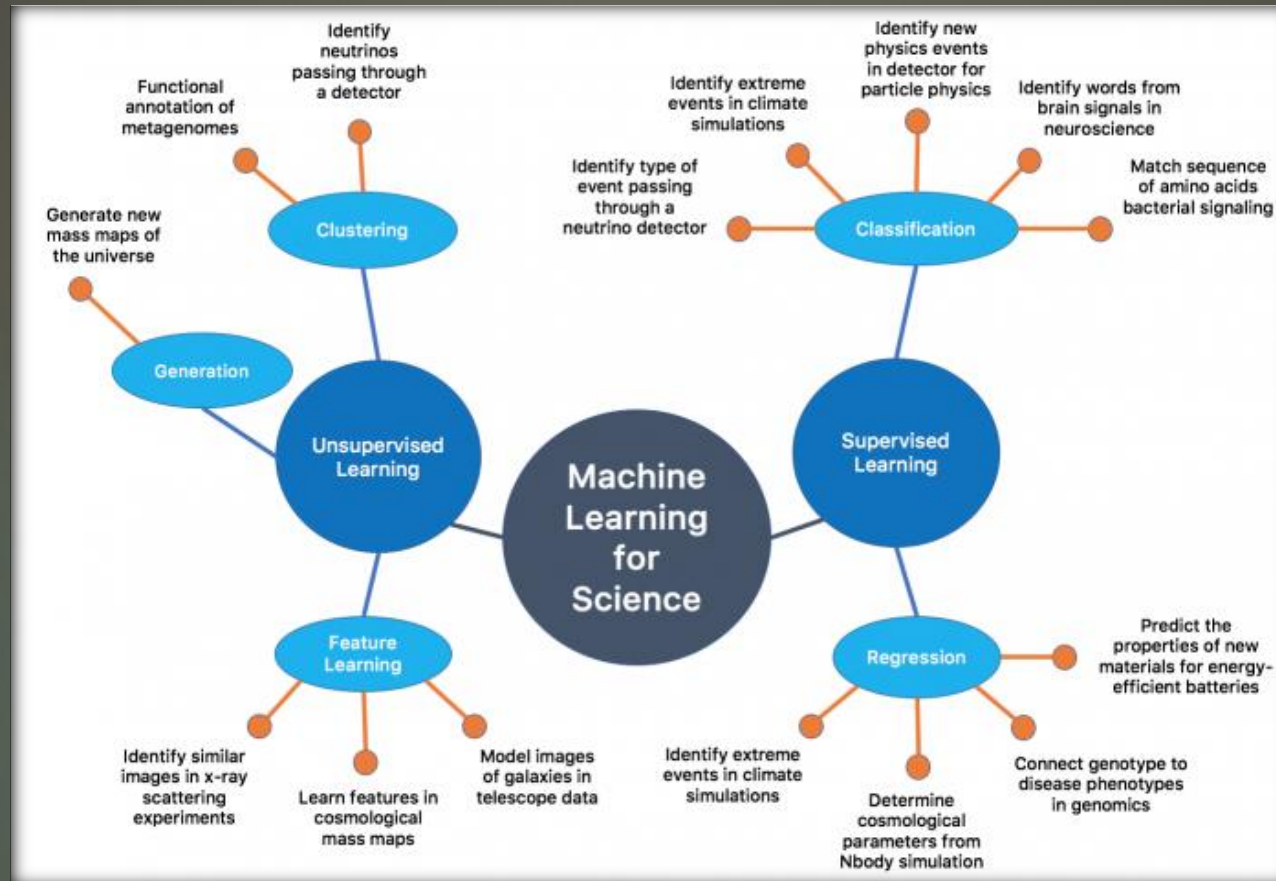


Chatbots and Artificial Intelligence

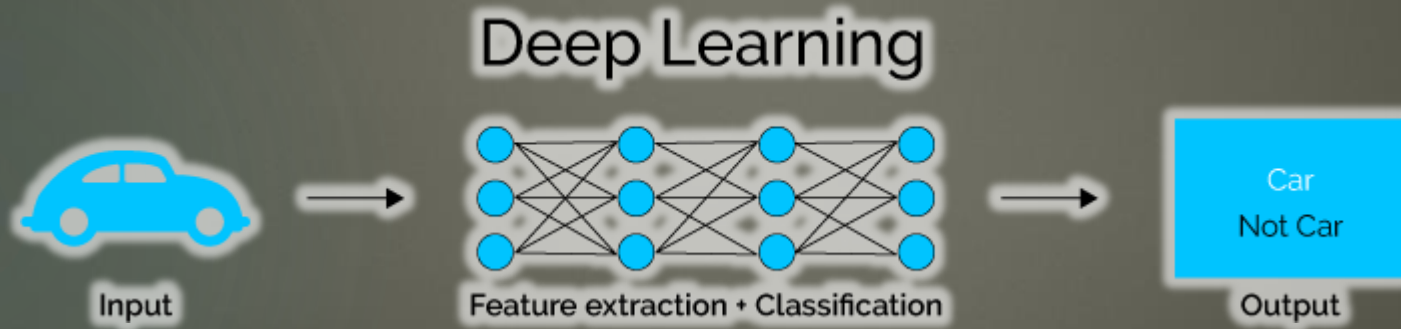
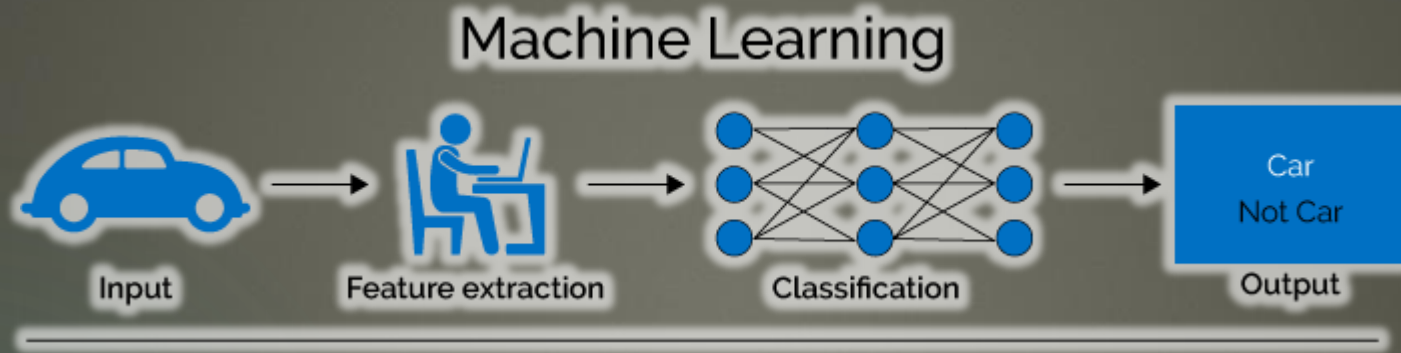
- ▶ NLP
- ▶ Training the bot
- ▶ **AI = { NLP (Natural Language/Speech) + Capability to Learn from data and Predict (Machine Learning) + Super Powers (Deep Learning = vision, image processing etc) }**

Artificial Intelligence





Source: Google Images



Source: Google Images

Connecting a bot to different messaging channels

Integration with

- FB Messenger,
- Twitter,
- Slack,
- WhatsApp, etc.



Source: Google Images

THANK YOU



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