Robotic Process Automation (RPA)

Harnessing the power of AI and ML

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1. Artificial Intelligence (AI)
2. Natural Language Processing
3. Information as a corporate asset
4. Smart devices that produce and consume IoT data
5. Trust – digital ethics frameworks

Data bots

- **Internet Bot**

- **Definition - What does *Internet Bot* mean?**

- A data bot, in its most generic sense, is <u>software</u> that performs an automated task over the data.

- More specifically, a bot is an automated application used to perform simple and repetitive tasks that would be time-consuming, mundane or impossible for a human to perform.

- Bots can be used for productive tasks, but they are also frequently used for malicious purposes.

AI deals with the following issues-

•Reasoning and Problem Solving

•Knowledge representation

•Planning

•Learning

Natural Language Processing (NLP)

- **Perception**

- **Motion and Manipulation**

- **Social Intelligence**

- **General Intelligence**

Machine Learning

- "Hey Siri, what is Machine Learning?"

- **_Machine Learning_** _is concerned with giving machines the ability to learn by training algorithms on a huge amount of data. It makes use of algorithms and statistical models to perform a task without needing explicit instructions._

- There are three types of learning here:

- Supervised and semi-supervised learning

- Unsupervised learning

- Reinforcement learning

Machine Learning

Machine Learning often deals with the following issues:

- Collecting data

- Filtering data

- Analyzing data

- Training algorithms

- Testing algorithms

- Using algorithms for future predictions

- Common examples of this phenomenon are virtual personal assistants, refined search engine results, image recognition, and product recommendations.

Data Science

- "The science and engineering of making intelligent machines, especially intelligent computer programs".
- Intelligence distinguishes us from everything in the world.
- How about consciousness?
- Making computers understand, apply knowledge.
- Also, improve skills - significant role in our evolution.