

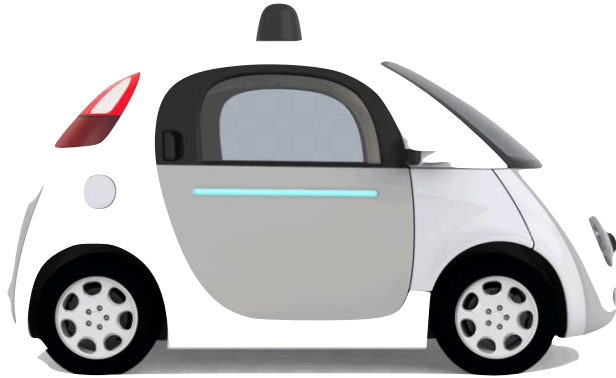


PRIMEINTUIT

Finishing School

Terminologies and Roles

What is Artificial Intelligence



Artificially Providing (Applications) ability for machines to learn, think and make decisions on there own without human intervention

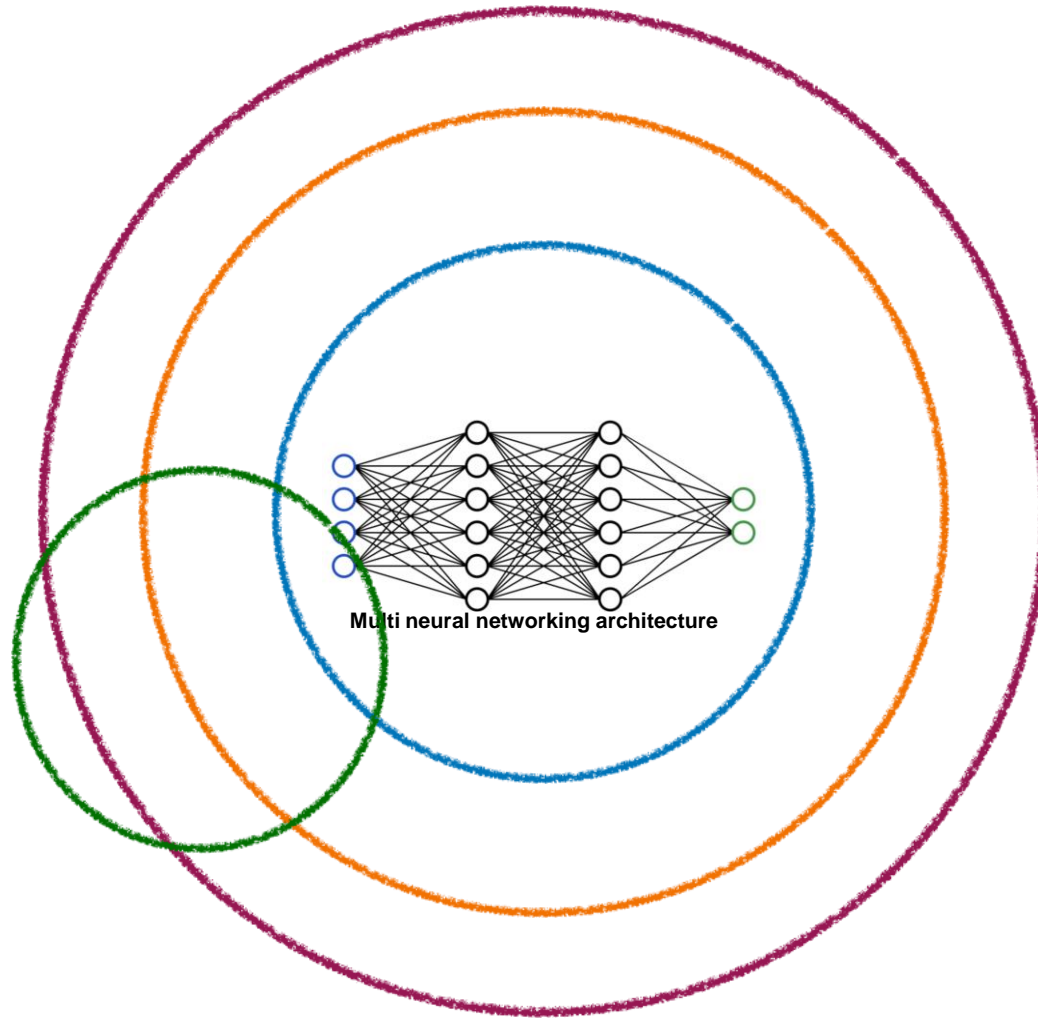


Ajathasatru's Bhuta Vahana Yantra



Talos the Greek Automaton

Different Terminologies



Artificial Intelligence

Applications that enables the machines to read, understand, think and learn from data

Machine Learning

Statistical tools which can analyse, explore & understand data

- Supervised
- Unsupervised
- Semi Supervised
- Reinforcement learning

Deep Learning

Architecture that helps machines to learn by mimicking human brain

- ANN
- CNN
- RNN
- DNN

Data Science

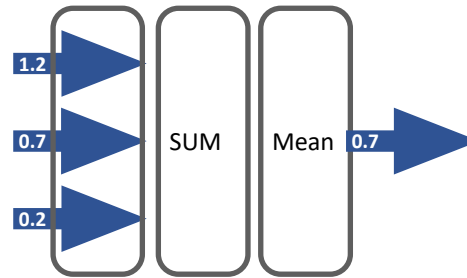
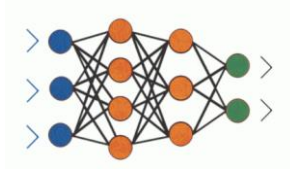
Science of collecting, storing, processing and describing data using ML,DL and mathematical tools to predict or draw inferences from data

- Statistics
- Probability
- Learner algebra

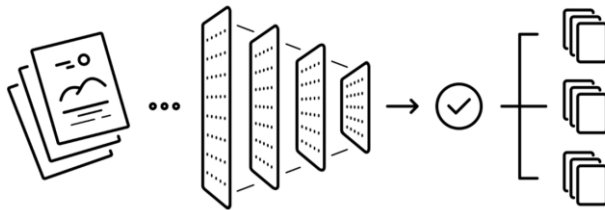


Different Terminologies

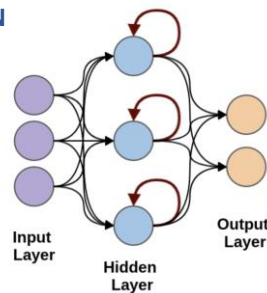
ANN



CNN



RNN

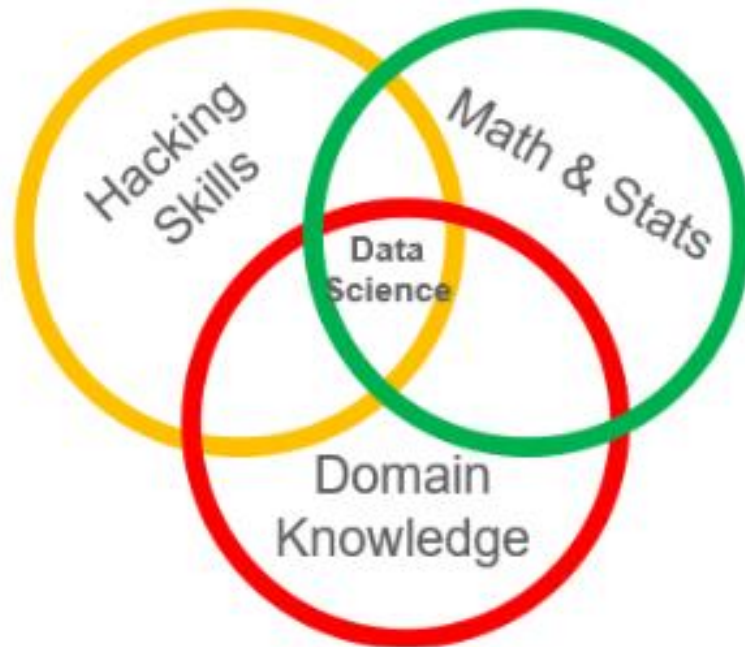


| | Data Science | Artificial Intelligence |
|--------------|--|--|
| Scope | Involves various underlying data operations | Limited to the implementation of ML algorithms |
| Type of Data | Structured and unstructured | Standardized in the form of embeddings and vectors |
| Tools | R, Python, SAS, SPSS, Keran, Scikit Learn | Scikit Learn, Kaffe, PyTorch, Shogun |
| Applications | Advertising, Marketing, internet search engine | Manufacturing, Automation, Robotics, Healthcare |

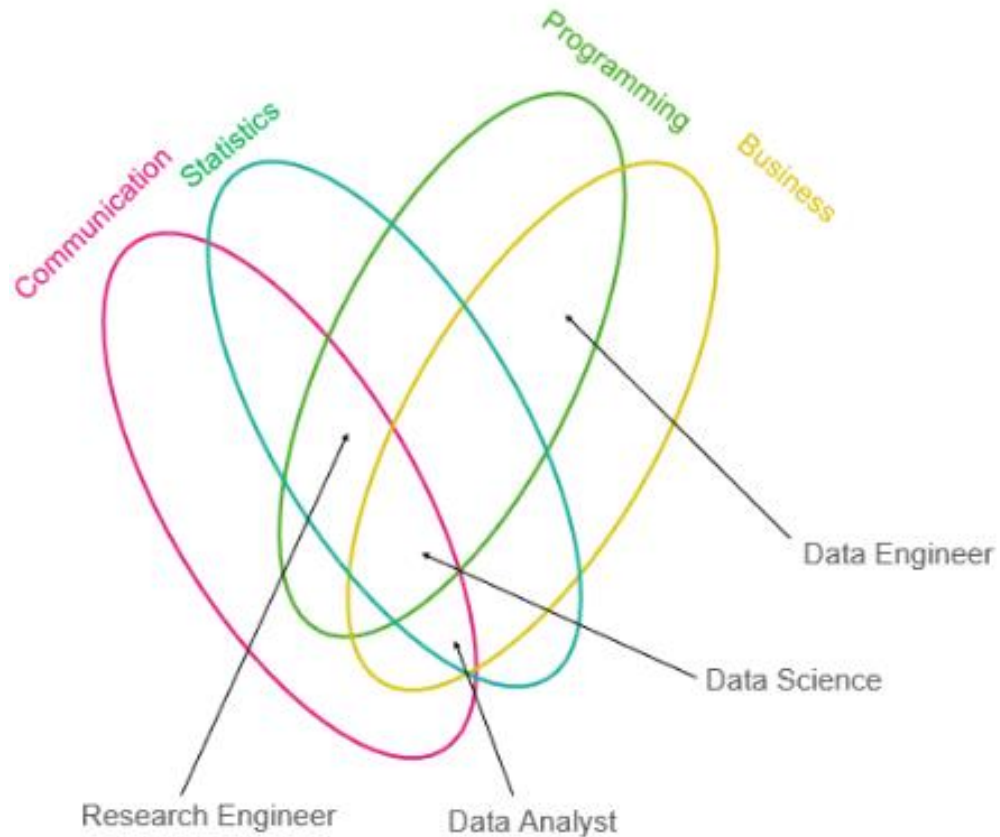
Natural language processing

- What is Natural Language
 - It is the language spoken by humans to express thoughts, actions, feelings, intents.
 - What ever a human speaks, writes, listens to is in the form of Natural Language
- Natural Language Processing or NLP is
 - Machine/Program that interacts with human, understand and process the Natural Language human beings speak
 - Application of computational techniques to the analysis and synthesis of Natural Language and Speech
 - Based on Statistical Language Modeling to “understand” the words

Larger perspective of Data Science



Skills and Roles in Data Science



| Roll Vs Knowledge | Business | Programming | Statistics | Communication |
|-------------------|----------|-------------|------------|---------------|
| Data Engineer | X | X | | |
| Data Analyst | X | | X | X |
| Research Engineer | | X | X | X |
| Data Scientist | X | X | X | X |