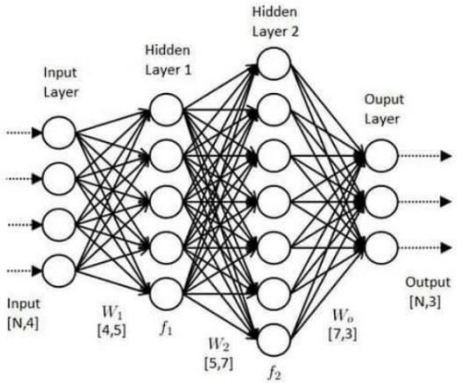
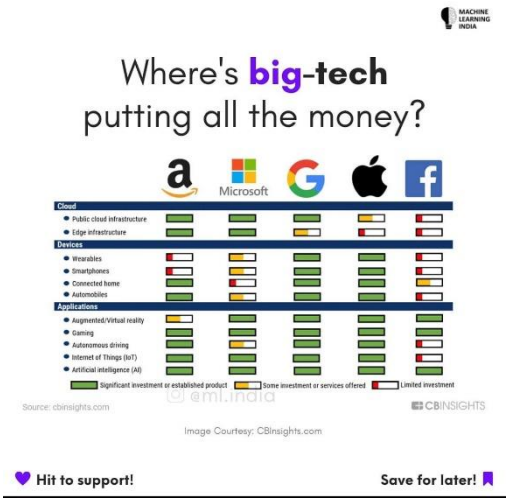
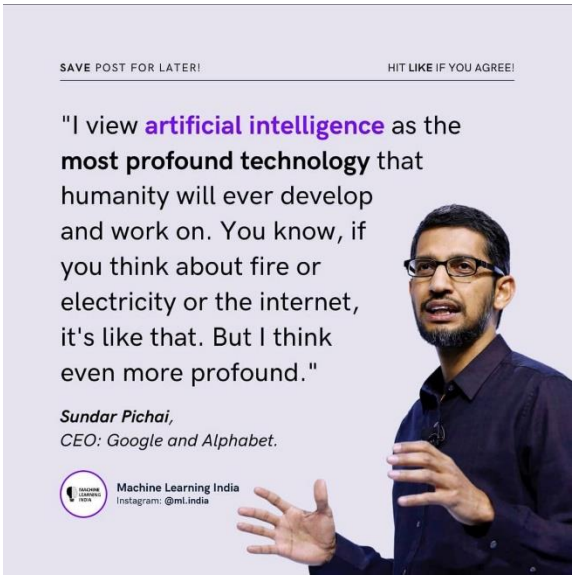
"I work with models."

Others:

Me:







Jobs with growing demand:

- Data Analysts and Scientists
- AI and Machine Learning Specialists
- Big Data Specialists
- Digital Marketing and Strategy Specialists
- Process Automation Specialists
- Business Development Professionals
- Digital Transformation Specialists
- Information Security Analysts
- Software and Application Developers
- Internet of Things Specialists

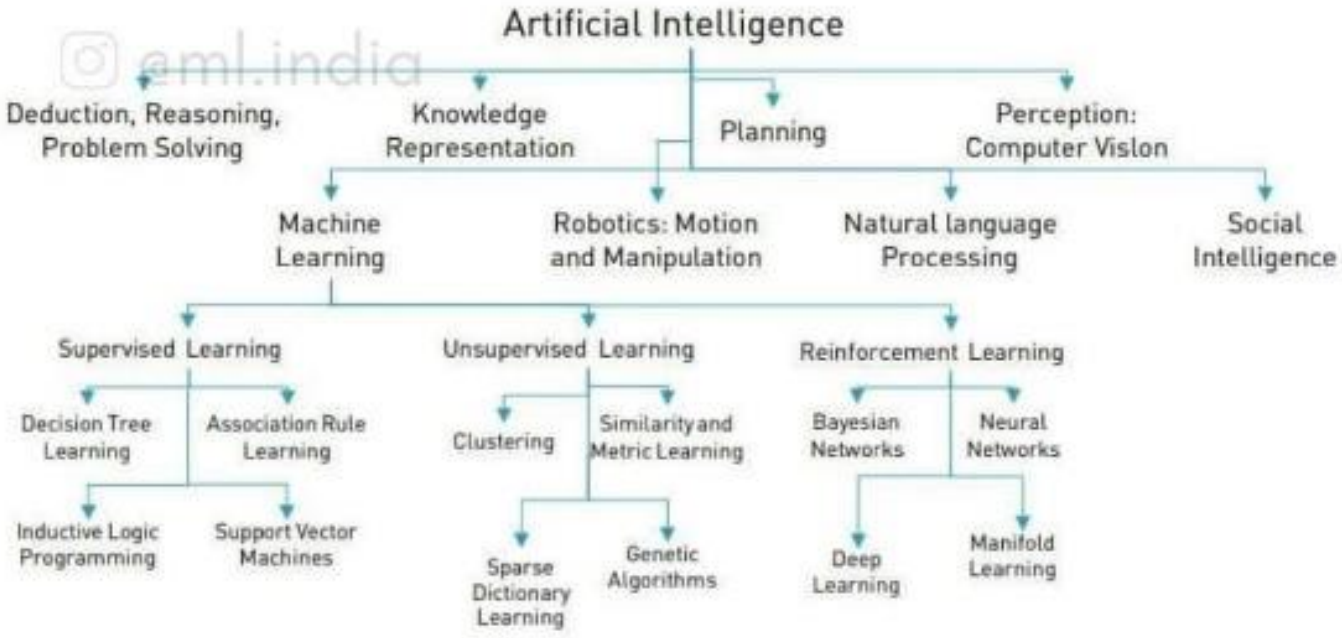
Jobs with reducing demand:

- Data Entry Clerks
- Administrative and Executive Secretaries
- Accounting, Bookkeeping and Payroll Clerks
- Accountants and Auditors
- Assembly and Factory Workers
- Services and Administration Managers
- Customer Service Workers
- General and Operations Managers
- Mechanics and Machinery Repairers
- Material Recording and Stock Keeping Clerks

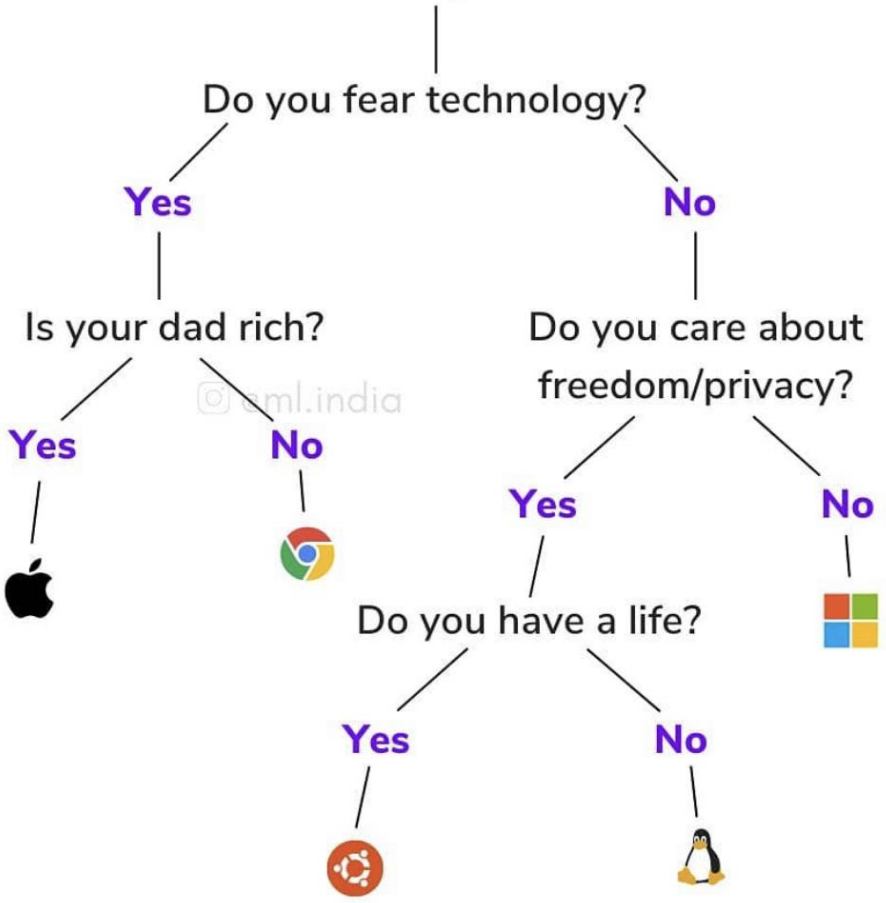
What's **artificial** **intelligence** all about?

- "Artificial Intelligence (AI) is the part of computer science concerned with designing intelligent computer systems, that is, systems that exhibit characteristics we associate with intelligence in human behavior - understanding language, learning, reasoning, solving problems, and so on." - Barr & Feigenbaum, 1981.

- The following figure illustrates major branches of AI:



Choosing an OS



Hit to support!

#ShareItIfYouGetIt

Basic Git Commands:

Git: configurations

```
$ git config --global user.name "FirstName LastName"
$ git config --global user.email "your-email@email-provider.com"
$ git config --global color.ui true
$ git config --list
```

Git: starting a repository

```
$ git init
$ git status
```

Git: staging files

```
$ git add <file-name>
$ git add <file-name> <another-file-name> <yet-another-file-name>
$ git add .
$ git add --all
$ git add -A
$ git rm --cached <file-name>
$ git reset <file-name>
```


Git: committing to a repository

```
$ git commit -m "Add three files"
$ git reset --soft HEAD^
$ git commit --amend -m <enter your message>
```

Git: pulling and pushing from and to repositories

```
$ git remote add origin <link>
$ git push -u origin master
$ git clone <clone>
$ git pull
```

Git: branching

```
$ git branch
$ git branch <branch-name>
$ git checkout <branch-name>
$ git merge <branch-name>
$ git checkout -b <branch-name>
```

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Core differences between **AI**, **Machine Learning** and **Deep Learning**:

 Artificial Intelligence	 Machine Learning	 Deep Learning
Artificial intelligence originated around 1950s.	Machine learning originated around 1960s.	Deep learning originated around 1970s.
AI represents simulated intelligence in machines.	Machine Learning is the practice of getting machines to make decisions without being programmed.	Deep Learning is the process of using Artificial Neural Networks to solve complex problems.
AI is a subset of Data Science.	Machine learning is a subset of AI & Data Science	Deep learning is a subset of Machine learning, AI & Data Science.
Aim is to build machines which are capable of thinking like humans.	Aim is to make machines learn through data so that they can solve problems.	Aim is to build neural networks that automatically discover patterns for feature detection.

Source: https://www.kaggle.com/getting-started/160809

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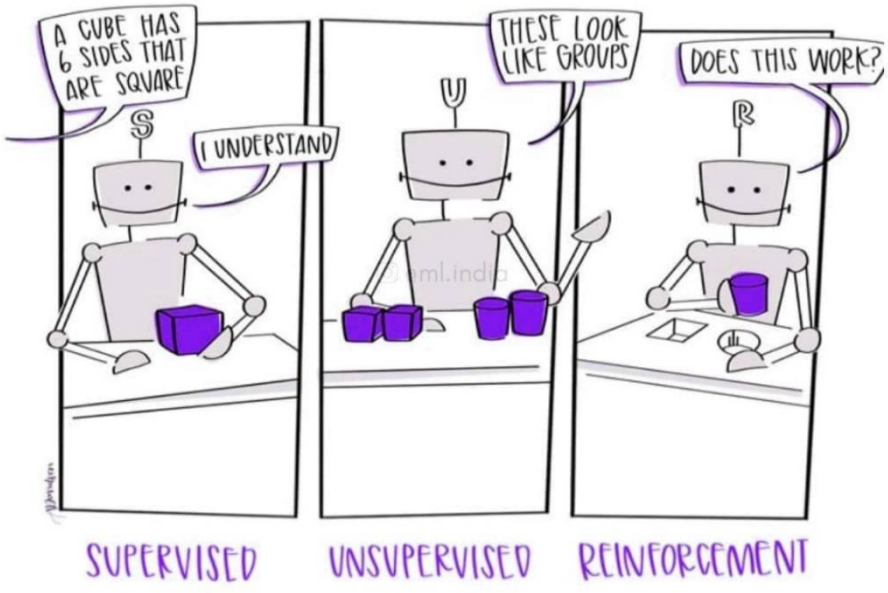
MACHINE LEARNING INDIA

Three main types of **Machine Learning Algorithms**



Source: Ceralytics

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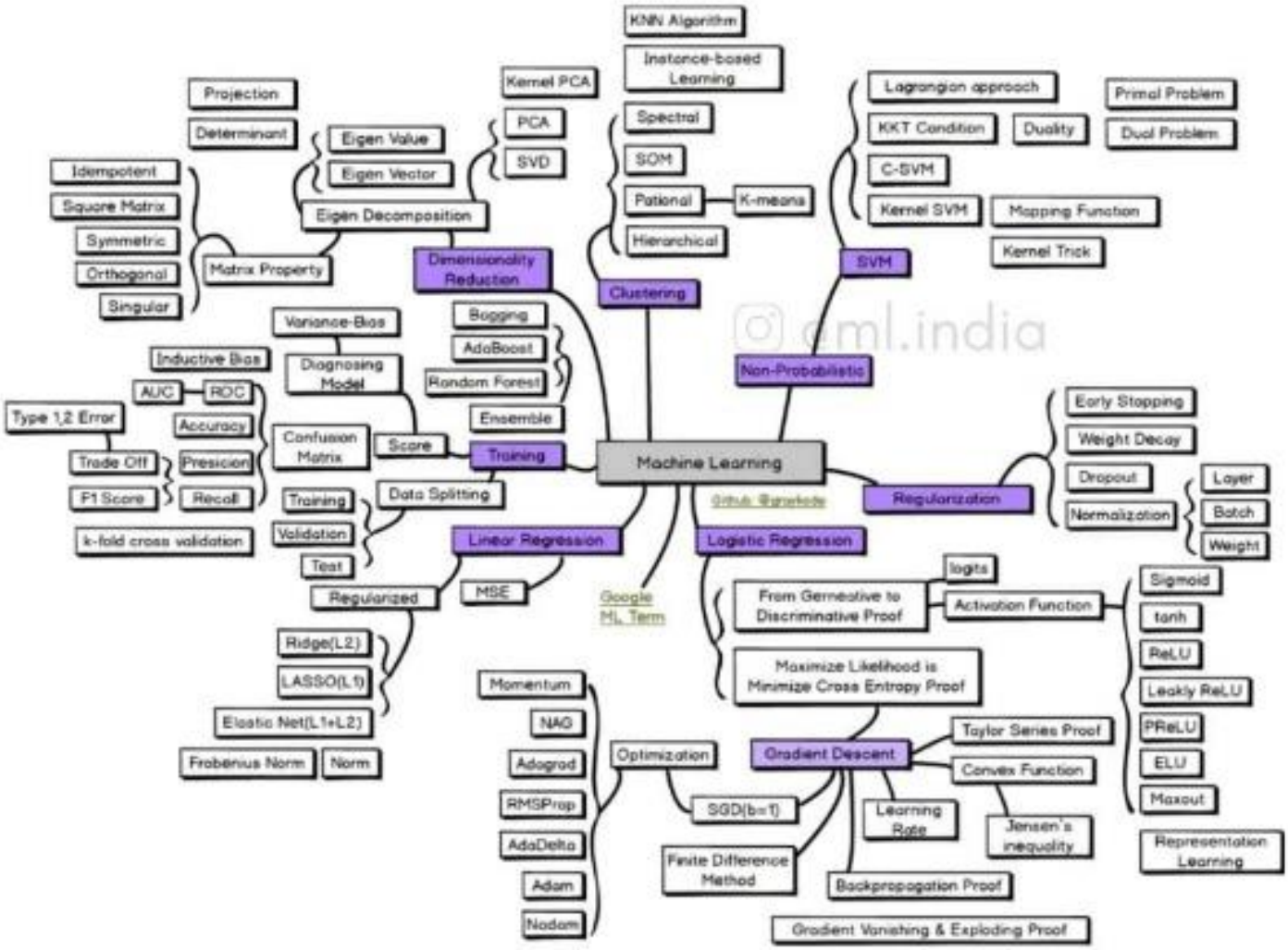
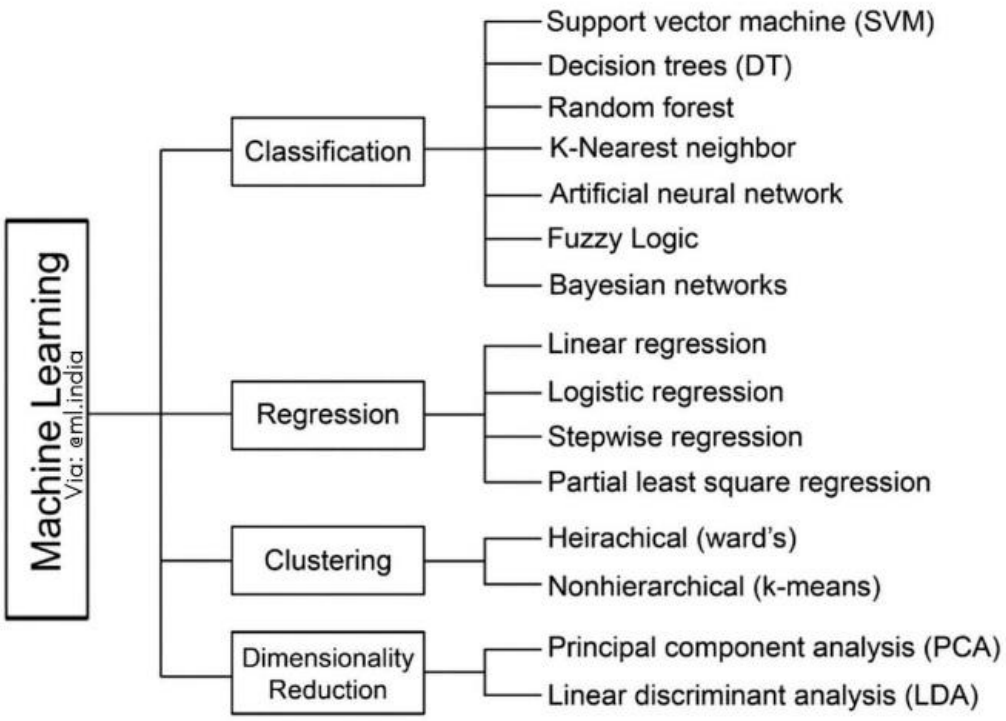
Machine Learning: **Mindmap**



Source: https://github.com/graykode/

15 most used machine learning algorithms:



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Big-O: Cheat Sheet

	Best	Average	Worst
Quick Sort	Ω (n log (n))	Θ (n log(n))	O (n^2)
Merge Sort	Ω (n log (n))	Θ (n log(n))	O (n log(n))
Timsort	Ω (n)	Θ (n log(n))	O (n log(n))
Heap Sort	Ω (n log (n))	Θ (n log(n))	O (n log(n))
Bubble Sort	Ω (n)	Θ (n^2)	O (n^2)
Insertion Sort	Ω (n)	Θ (n^2)	O (n^2)
Selection Sort	Ω (n^2)	Θ (n^2)	O (n^2)
Tree Sort	Ω (n log (n))	Θ (n log(n))	O (n^2)
Shell Sort	Ω (n log (n))	Θ (n (log(n))^2)	O (n (log(n))^2)
Bucket Sort	Ω (n+k)	Θ (n+k)	O (n^2)
Radix Sort	Ω (nk)	Θ (nk)	O (nk)
Counting Sort	Ω (n+k)	Θ (n+k)	O (n+k)
Cubesort	Ω (n)	Θ (n log(n))	O (n log(n))
Smooth Sort	Ω (n)	Θ (n log(n))	O (n log(n))
Tournament Sort	-	Θ (n log(n))	O (n log(n))
Stooge sort	-	-	O($n^{\log 3 / \log 1.5}$)
Gnome/Stupid sort	Ω (n)	Θ (n^2)	O (n^2)
Comb sort	Ω (n log (n))	Θ (n^2/p^2)	O (n^2)
Odd – Even sort	Ω (n)	-	O (n^2)

Source: codenza.app

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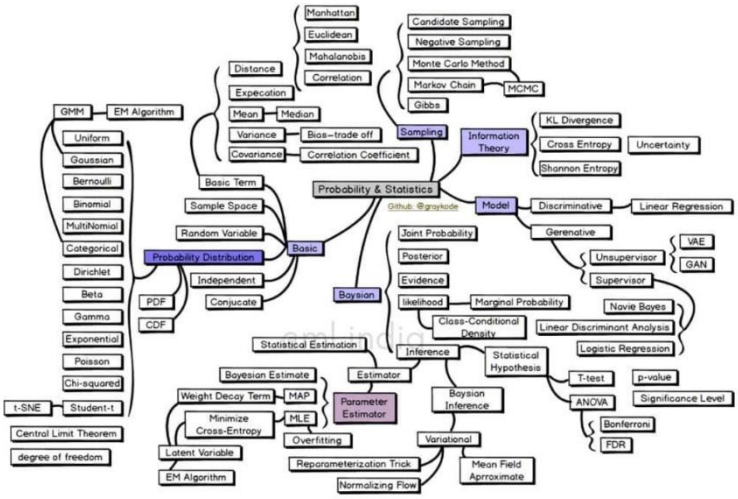
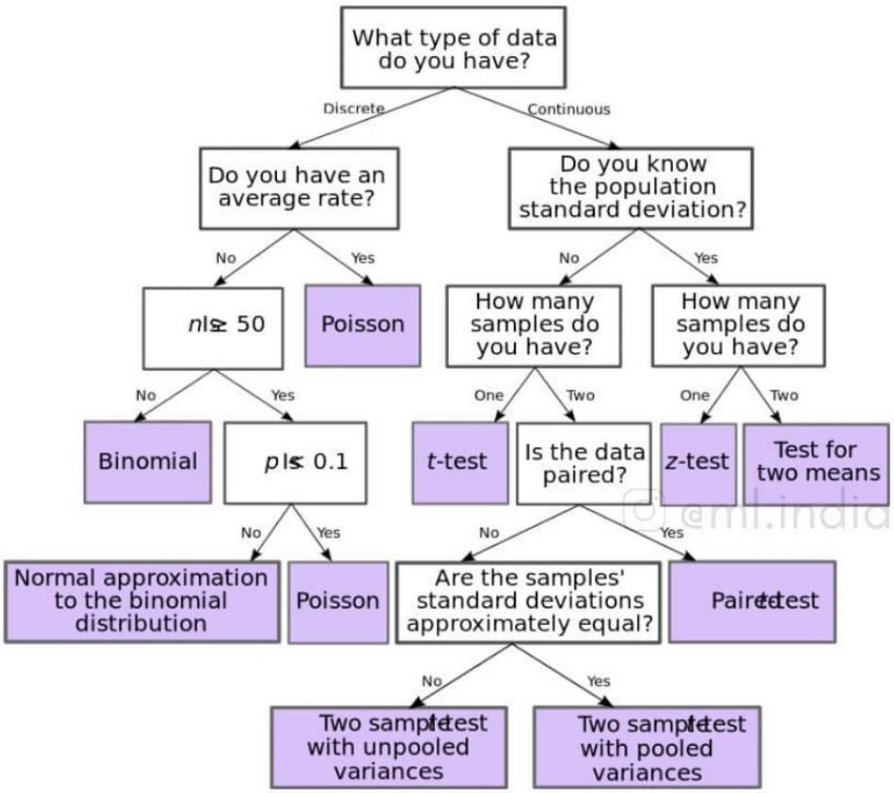
A **mindmap** for concepts in **Statistics** and **Probability**



Source: https://github.com/graykode/

♥ Hit to support! Save for later! ■

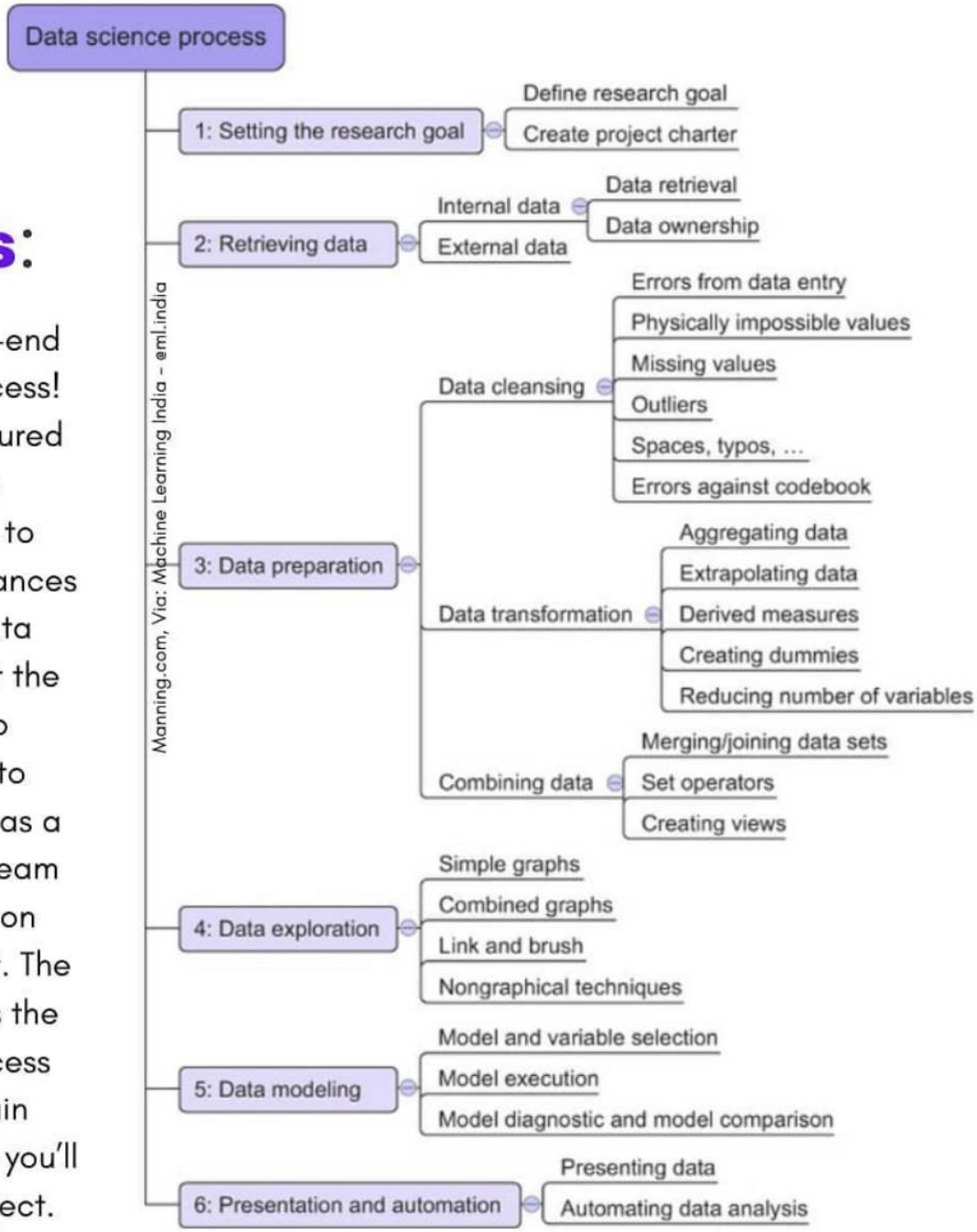
A **cheatsheet** on selecting a **hypothesis test**:



Source: Newcastle University

Data science **process**:

Here's the end-to-end data science process! Following a structured approach to data science helps you to maximize your chances of success in a data science project at the lowest cost. It also makes it possible to take up a project as a team, with each team member focusing on what they do best. The figure summarizes the data science process and shows the main steps and actions you'll take during a project.



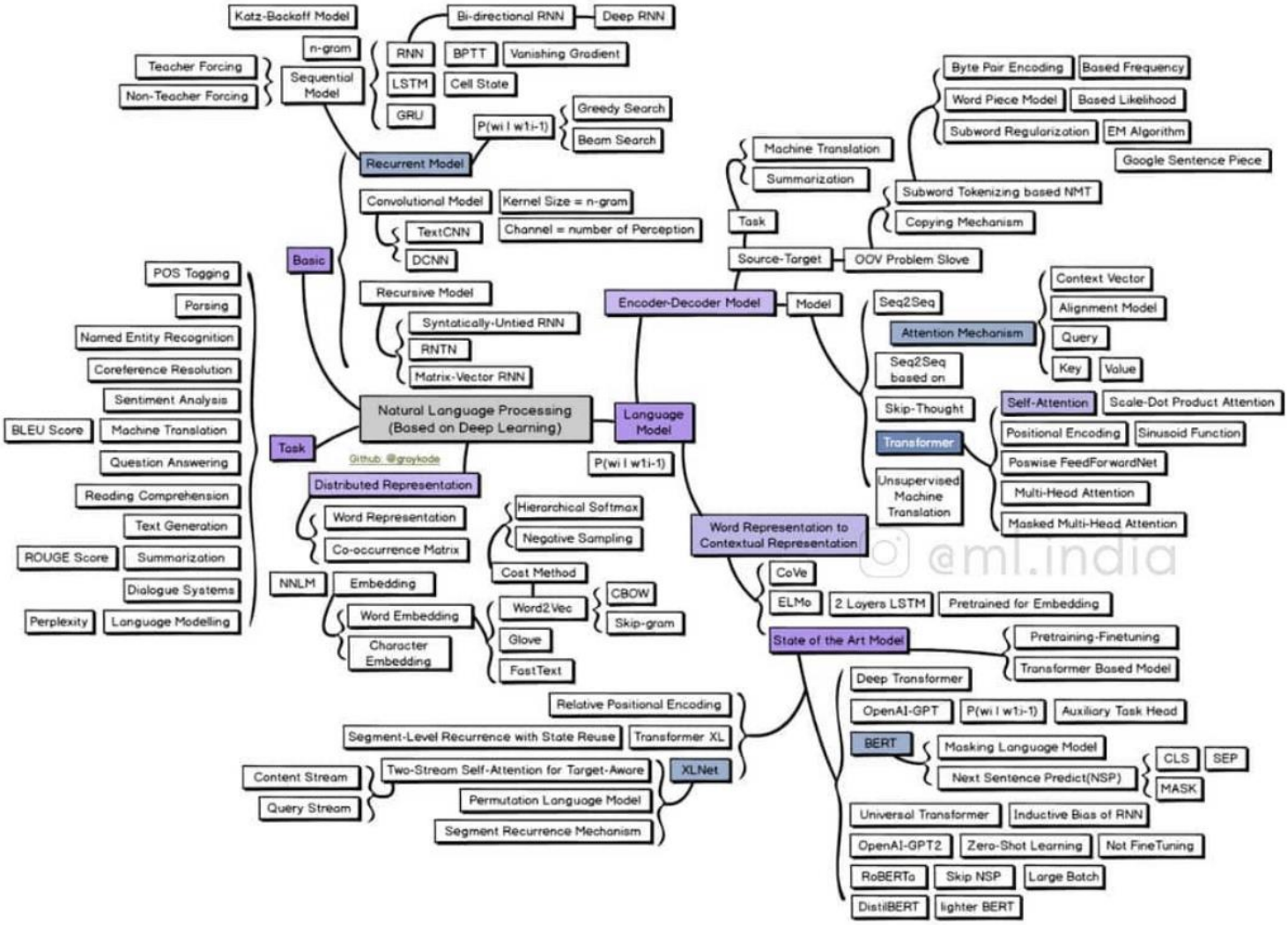
Categorised **NLP** Applications

NLP can help businesses **analyze** data and **discover** insights, **automate** time-consuming processes, and help them gain a competitive advantage. Here are some of the most interesting applications of natural language processing in business:

Search	Web	Documents	Autocomplete
Editing	Spelling	Grammar	Style
Dialog	Chatbot	Assistant	Scheduling
Writing	Index	Concordance	Table of contents
Email	Spam filter	Classification	Prioritization
Text mining	Summarization	Knowledge extraction	Medical diagnoses
Law	Legal inference	Precedent search	Subpoena classification
News	Event detection	Fact checking	Headline composition
Attribution	Plagiarism detection	Literary forensics	Style coaching
Sentiment analysis	Community morale monitoring	Product review triage	Customer care
Behavior prediction	Finance	Election forecasting	Marketing
Creative writing	Movie scripts	Poetry	Song lyrics

Source: Manning Publications

A **mindmap** for concepts in **Natural Language Processing**



Source: https://github.com/graykode/

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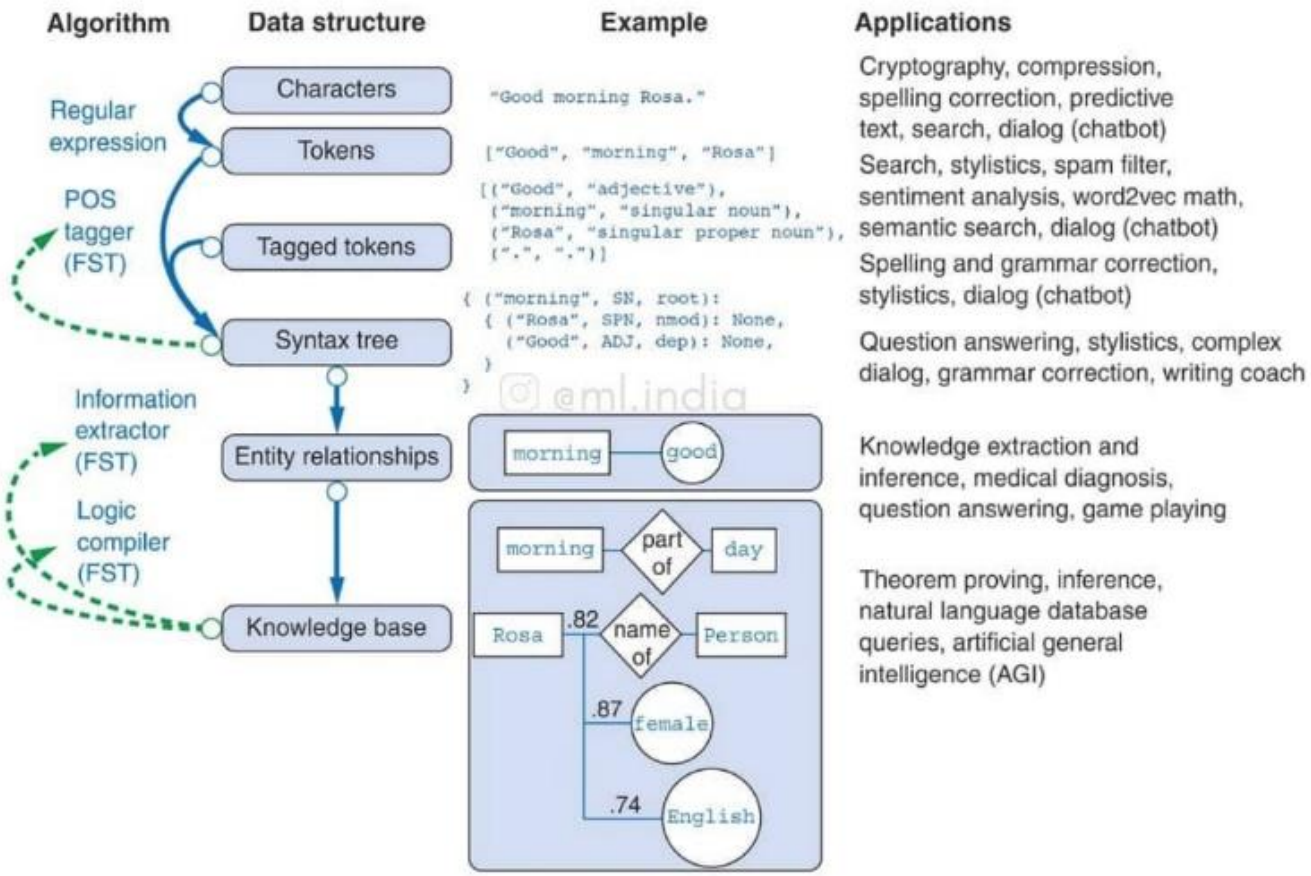
Layers in a NLP pipeline:

Source: Manning Publications



To learn the details, sign up for our exhaustive, **16-hour workshop** on **Hands-On Natural Language Processing**. Starting: June 19, 2021.
Link: bit.ly/mlinlpw3 (mentioned in our bio).

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