



A look into the future of tech



Al: Artificial Intelligence

ML: Machine Learning

Machine Learning

Example

Logistic regression

Deep Learning

Example

MLPs

Representation Learning

Example

· Shallow autoenoders

Αl

Example

Knowledge bases

Example of Al Autonomous Vehicle

Autonomous vehicles, also known as self-driving cars, are vehicles that can operate without human input. They use sensors, cameras, and other technologies to perceive their environment, and they use artificial intelligence and machine learning algorithms to make decisions and control the vehicle.

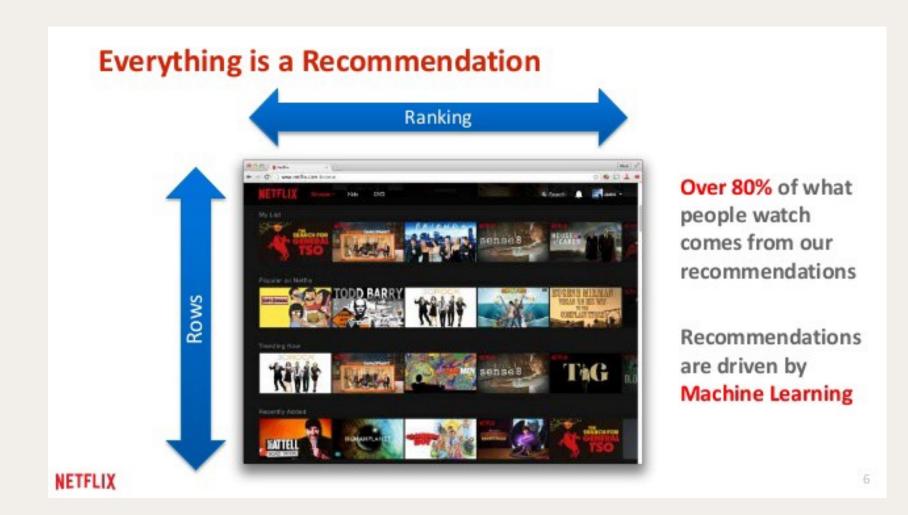
The role of AI in autonomous vehicles is to enable them to sense their environment, interpret the data, and make decisions based on that data. This includes recognizing objects, predicting their movements, and adjusting the vehicle's speed and trajectory accordingly. AI is crucial to ensuring the safety and efficiency of autonomous vehicles.



Example of ML Personalized Recommendation

Personalized recommendation systems are algorithms that suggest content or products to users based on their preferences, behaviors, and interactions with a platform. These systems use machine learning techniques to analyze data and make predictions about what the user is likely to be interested in.

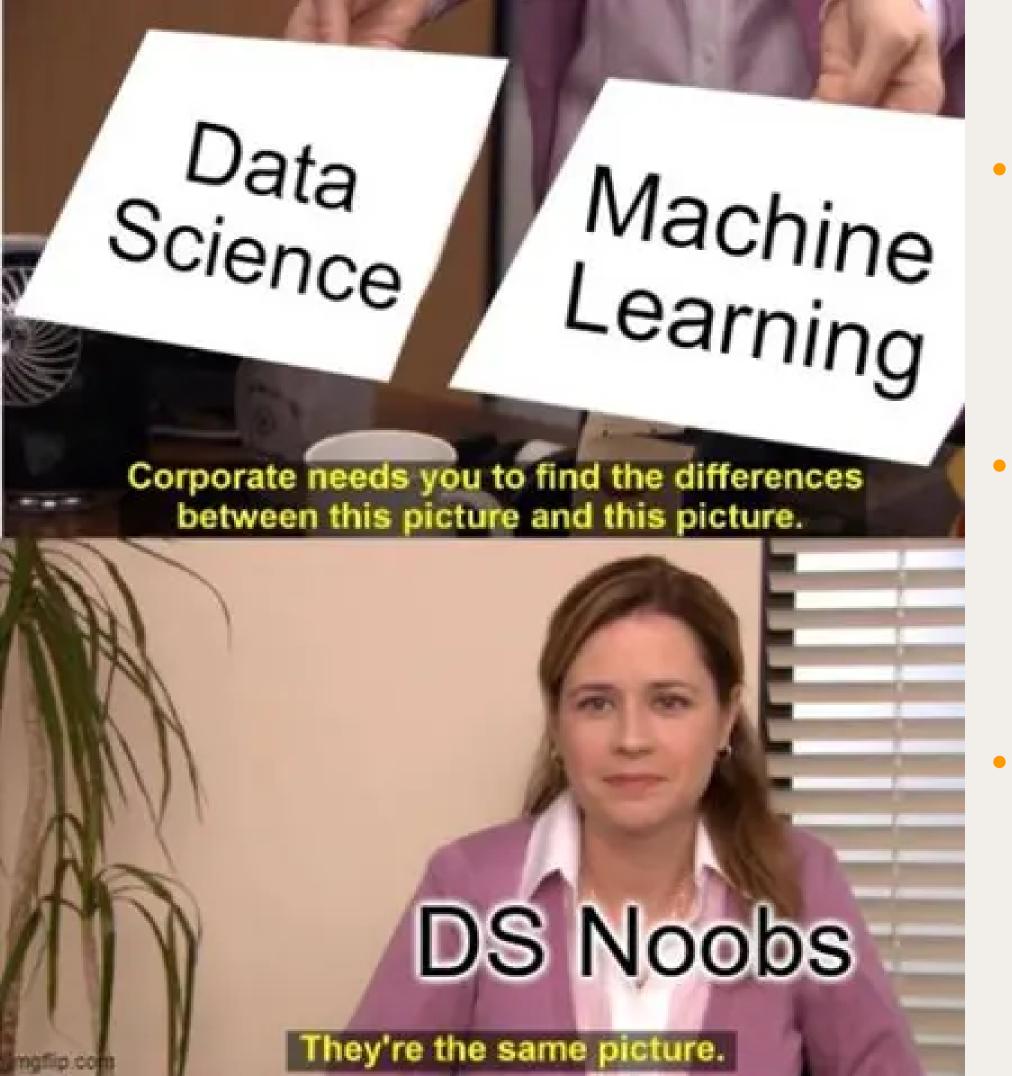
The role of machine learning in personalized recommendations is to analyze data on a user's preferences, behaviours, and interactions with a platform, and then use that information to suggest content or products that the user is likely to be interested in. Machine learning algorithms can adapt to new data over time, improving the accuracy of their recommendations.



Let's Dive Into Data Science

Why Data Science?

- Data Science is a broader field that includes AI & ML
- Data Science includes a wider range of skills, including data analysis, visualization, and domain expertise
- Data Science helps to solve a wider range of problems beyond AI & ML, such as business analytics, data engineering, and data governance.

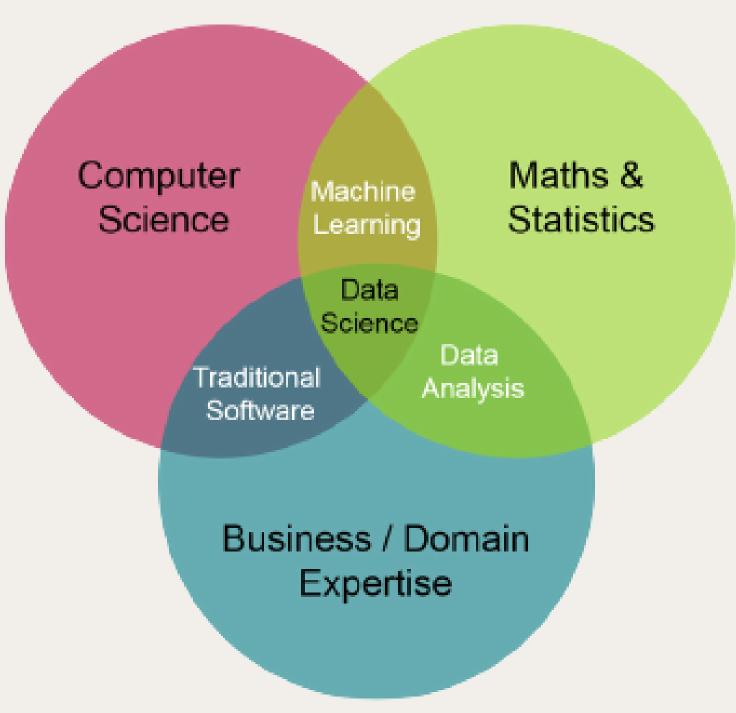


• For example, a data scientist might use data analysis and visualization techniques to identify patterns in customer behaviour and recommend changes to a marketing strategy.

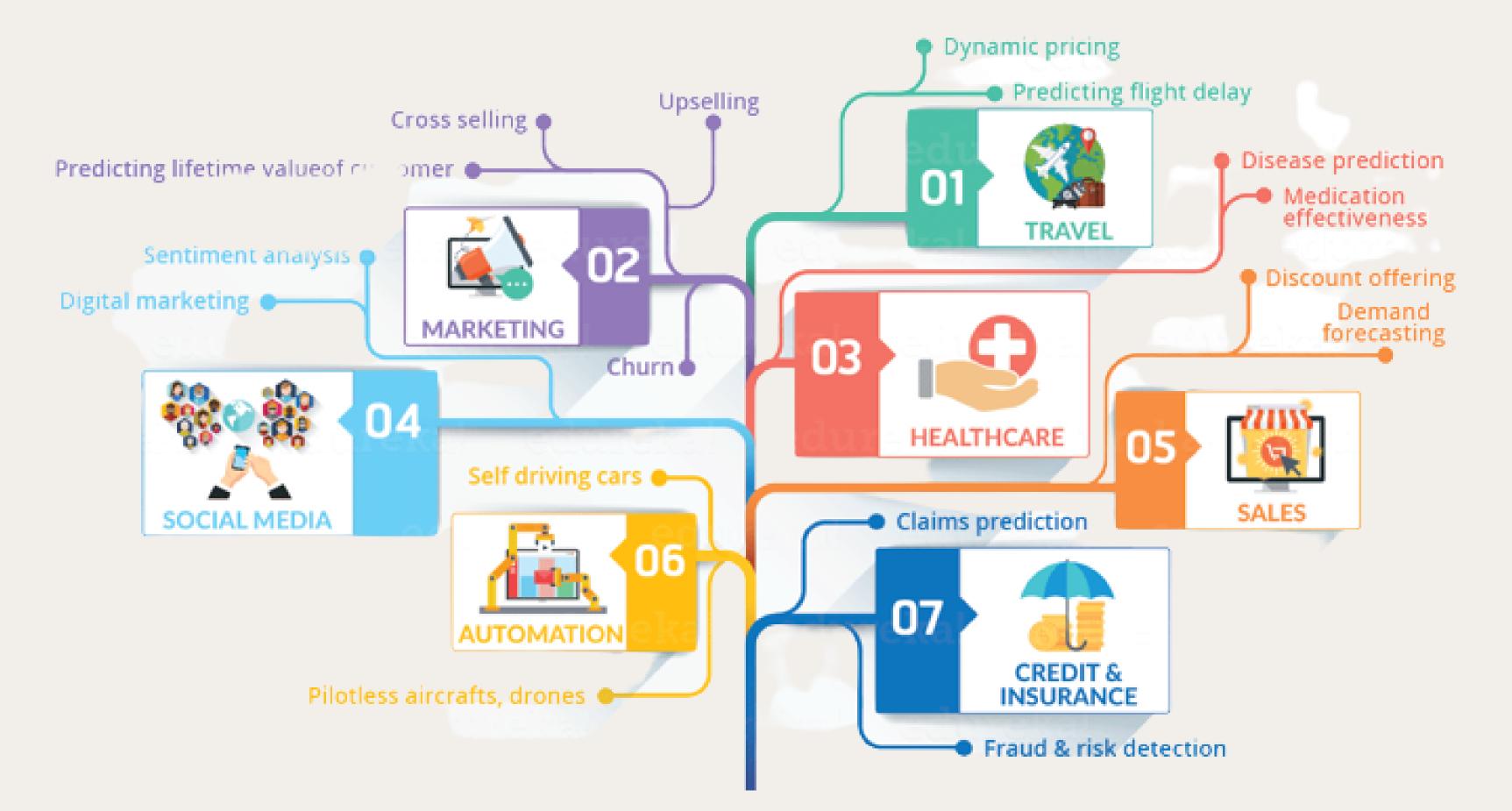
 In contrast, a machine learning engineer might develop an algorithm that can predict which customers are most likely to purchase a product based on their past behaviour.

 Both approaches require different skills and expertise but can be used together to solve complex problems in various industries.

What is Data Science?



Applications of Data Science



Misconceptions & Career Scope

Data Scientist

also known as Data Managers, statisticians.



A data scientist will be able to take data science projects from end to end. They can help store large amounts of data, create predictive modelling processes and present the findings.

Skills: Mathematics, Programming, Communication







Will use programmes such as: SQL, Python, R

Data Engineers

also known as database administrators and data architects.



They are versatile generalists who use computer science to help process large datasets. They typically focus on coding, cleaning up data sets, and implementing requests that come from data scientists.

Skills: Programming, Mathematics, Big data







Will use programmes such as: Hadoop, NoSQL, and Python

Data Analysts

also known as business Analysts.



They typically help people from across the company understand specific queries with charts.

Skills: Statistics, Communication, Business knowledge

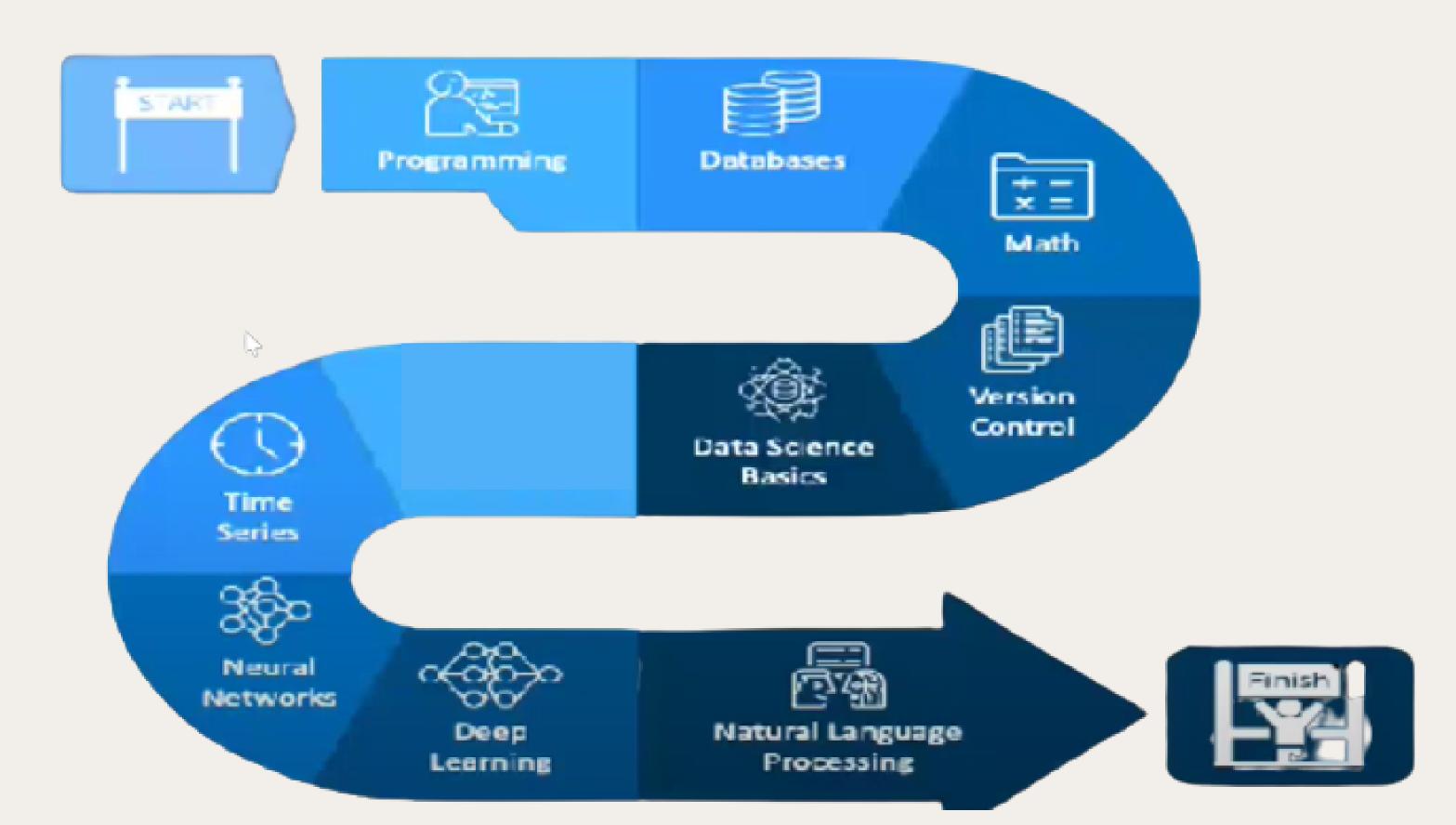






Will use programmes such as: Excel, Tableau, SQL

RoadMap



What we think Date Science is.

What it really is.

Analysis

Presentation

Programming

Statistics

Cloud Computing

Big data

Mathematics

Visualization

Any Questions?