Introduction to AI

Introduction to AI

- AI = Artificial Intelligence
- Makes computers smart, like humans
- Examples of AI in daily life:

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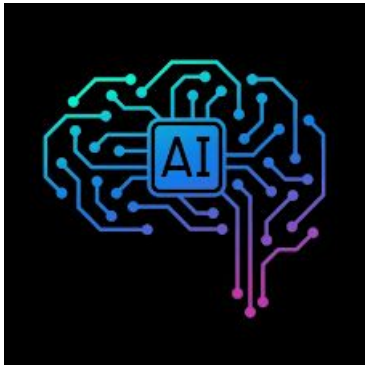
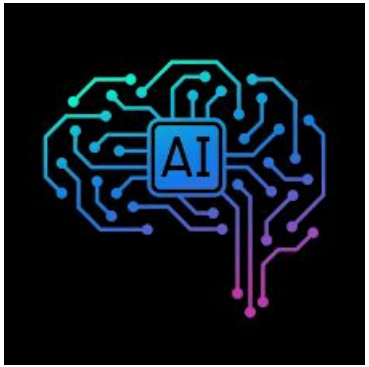


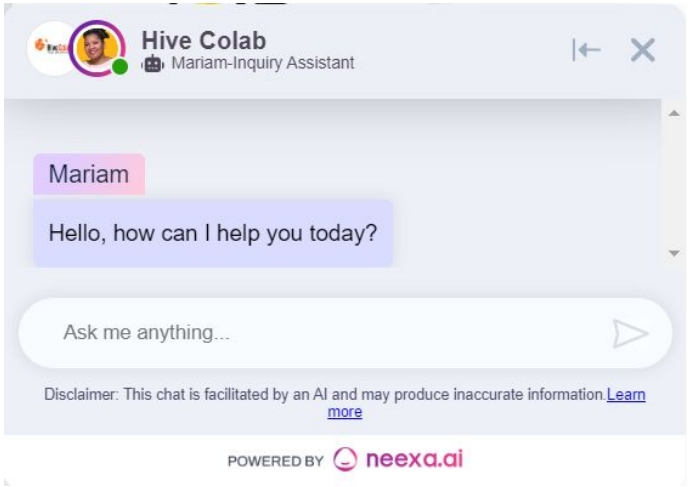
Introduction to AI

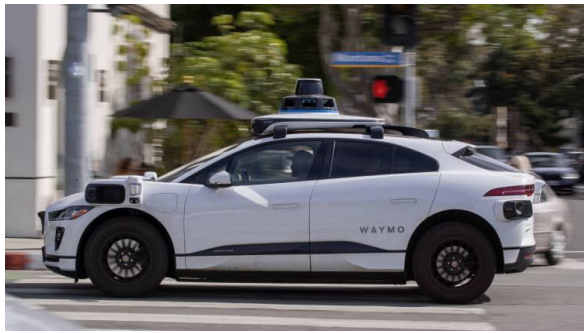
- AI = Artificial Intelligence
- Makes computers smart, like humans
- Examples of AI in daily life:
    - Virtual assistants: Siri, Google Assistant
    - Youtube: Video recommendations
    - Email: Spam filters
    - Language Translation
    - Customer Service Chatbots



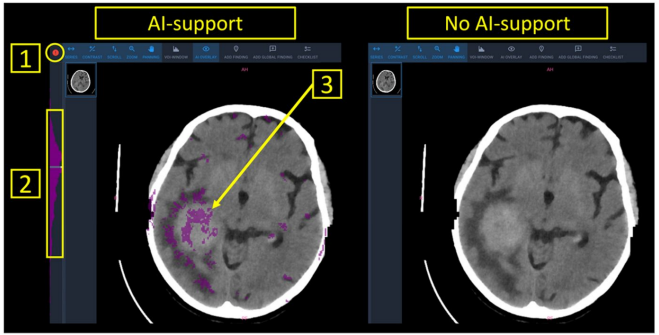
Why AI Matters

- AI is the future, just like the internet was
- AI is everywhere: healthcare, finance, education, entertainment
- Learning AI is a valuable skill for future jobs
- Knowing AI is like knowing how to use the internet





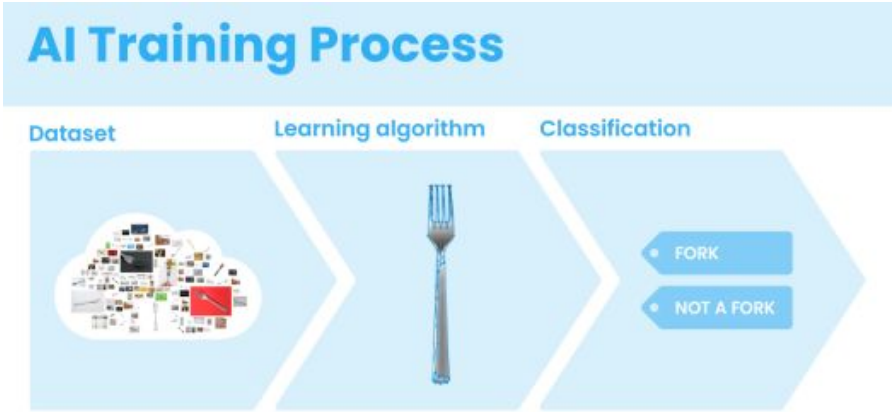
TESLA



Google Translate

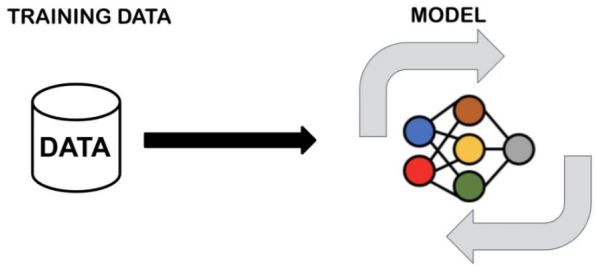
How AI Learns

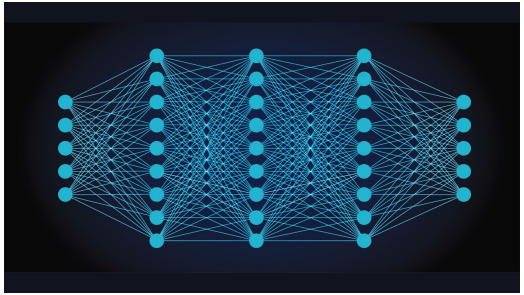
- AI learns from data, like humans learn from experience
- Example: How AI recognizes images (e.g., cats vs. dogs)
- Recognizes patterns, e.g., AI learns to recognize cats by seeing many cat photos
- Difference from traditional programming:
  - Traditional: Rule-based
  - AI: Learning-based



How AI Works Behind the Scenes

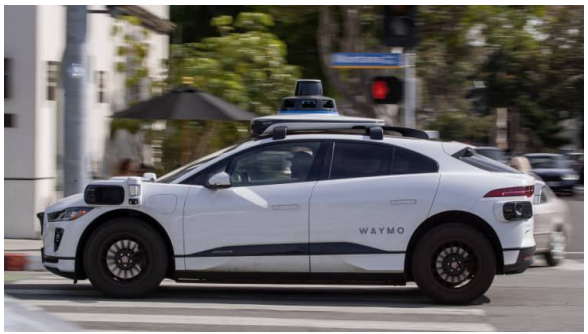
- AI uses data to learn and make decisions
- Machine Learning: AI learns from examples, improves over time
- Deep Learning: A type of machine learning that uses neural networks, inspired by the human brain
- Importance: AI gets better as it processes more data





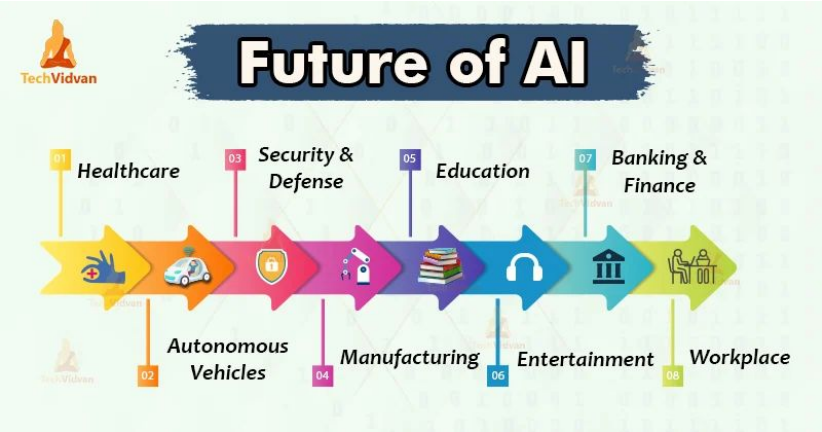
Types of AI

- Narrow AI: AI that does one specific task (e.g., virtual assistants, recommendation systems)
- General AI: AI that can perform any intellectual task a human can do (still in the future)
- Examples of Narrow AI:
  - Self-driving cars
  - Facial recognition
  - Language translation (e.g., Google Translate)



The Future of AI

- AI in everyday life: More integrated into smart homes, personal assistants
- AI in Transportation: Autonomous vehicles becoming common
- AI in Robotics: Robots performing more complex tasks, working alongside humans
- AI in Entertainment: Personalized content creation (e.g., music, videos, games)
- AI and Creativity: AI generating art, music, and creative content

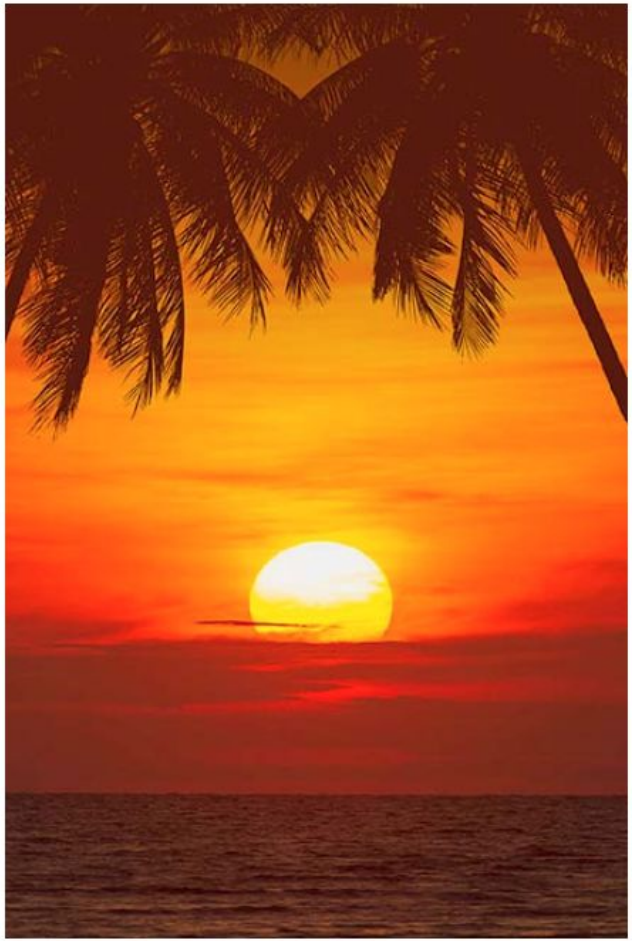


A

B

A

B



Real

AI

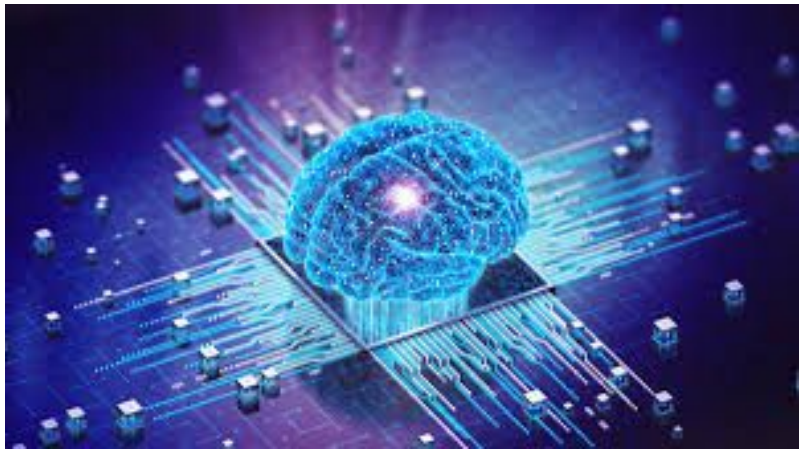
A

B

A

B

Recap

- AI is everywhere and is becoming more important every day
- Understanding AI will be crucial for all future careers
- AI can help solve complex problems in many fields
- It can help you with your studies

AI is the future—be part of it!