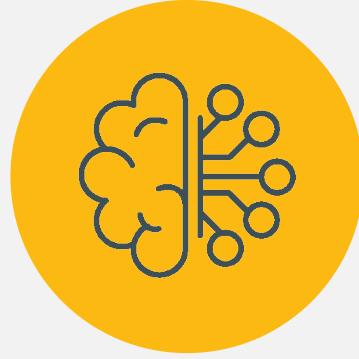


Software Development

Prompt Engineering

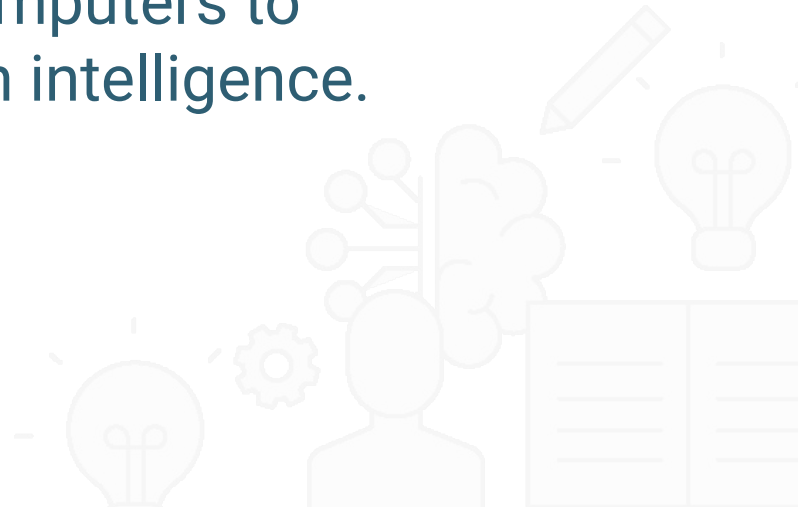
Module 11



Artificial Intelligence



Artificial Intelligence (AI)
is a field of computer science
that enables computers to
simulate human intelligence.





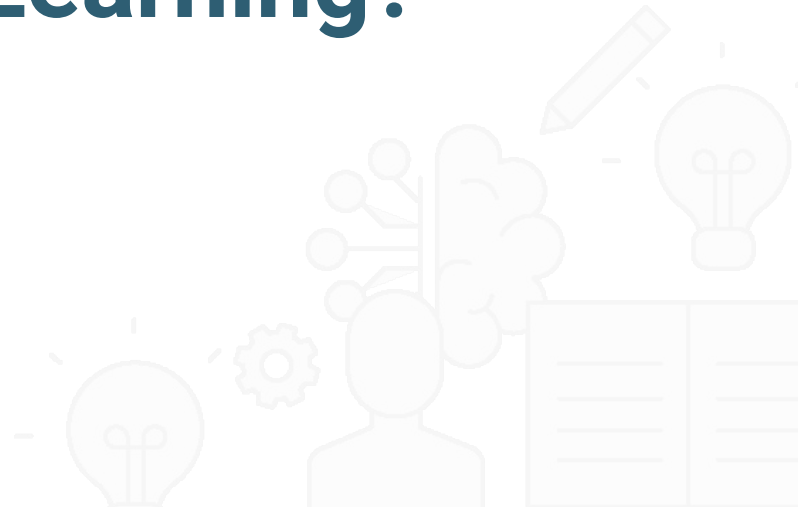
Artificial Intelligence

- Machine Learning
- Natural Language Processing
- Robotics
- Expert Systems
- Speech Recognition
- Deep Learning





What is **Machine Learning?**





Machine Learning (ML)

is a subset of AI that enables computer algorithms to learn from data and make decisions or predictions about future data.



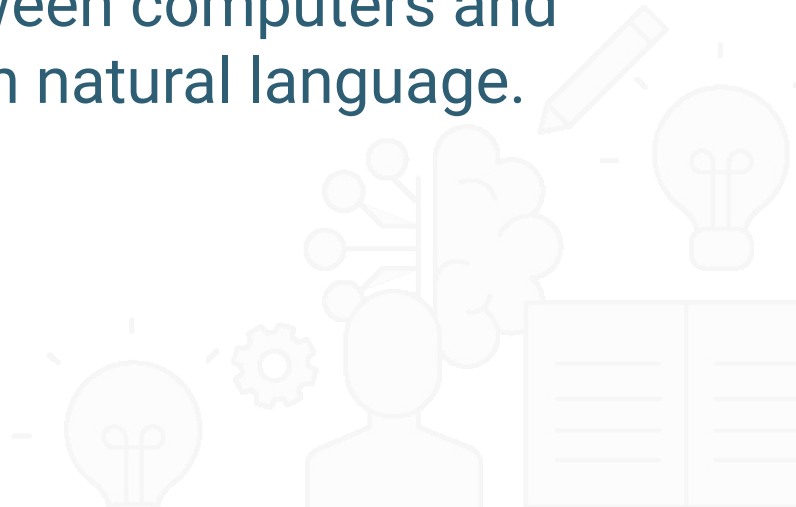


What is **Natural Language Processing?**





Natural Language Processing (NLP)
is a subset of AI that focuses on the
interaction between computers and
humans through natural language.

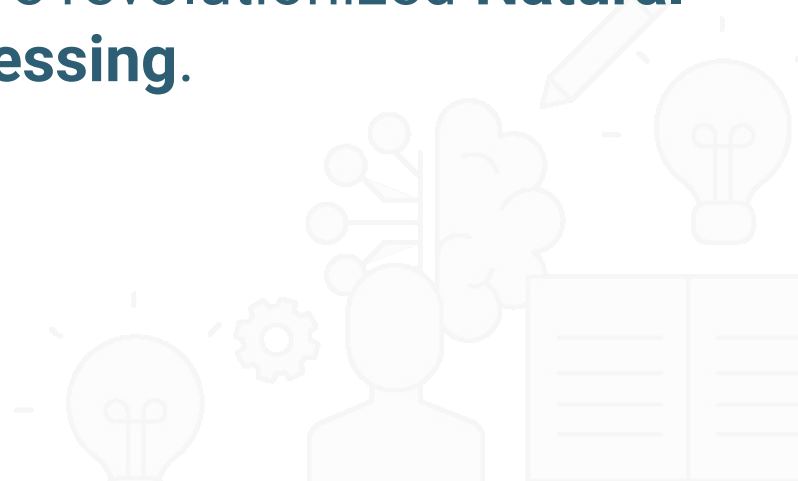




Large Language Models

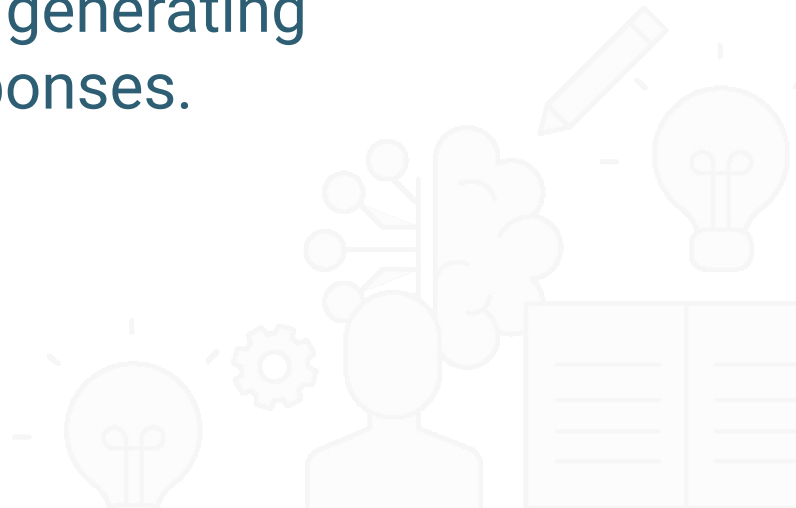


Large Language Models (LLMs)
are powerful **Machine Learning**
models that have revolutionized **Natural**
Language Processing.





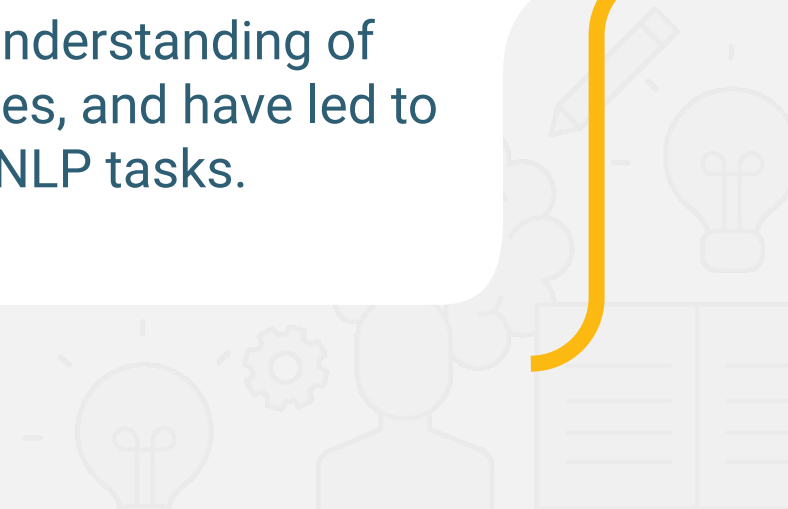
LLMs are trained on vast amounts of text data and are capable of processing and generating human-like responses.





Transformers are a significant breakthrough in the architecture for Large Language Models.

Transformers enable a better understanding of the context of words and phrases, and have led to huge improvements in various NLP tasks.





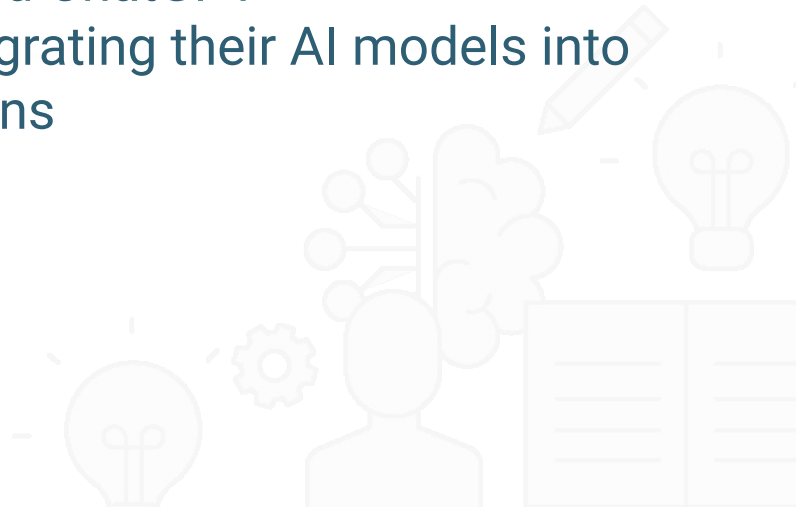
What is **OpenAI**?





OpenAI is a non-profit research organization that develops AI and provides:

- A number of very popular LLMs
- A chatbot called ChatGPT
- An API for integrating their AI models into your applications





Prompt Engineering



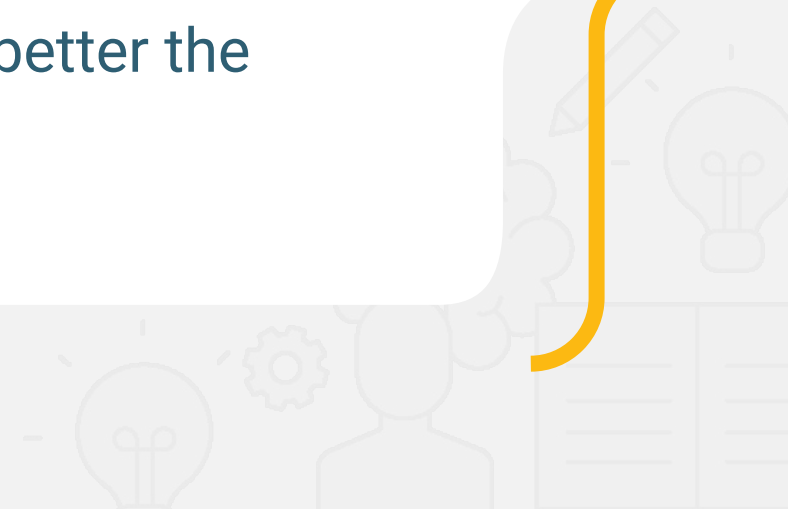
What is a **prompt**?





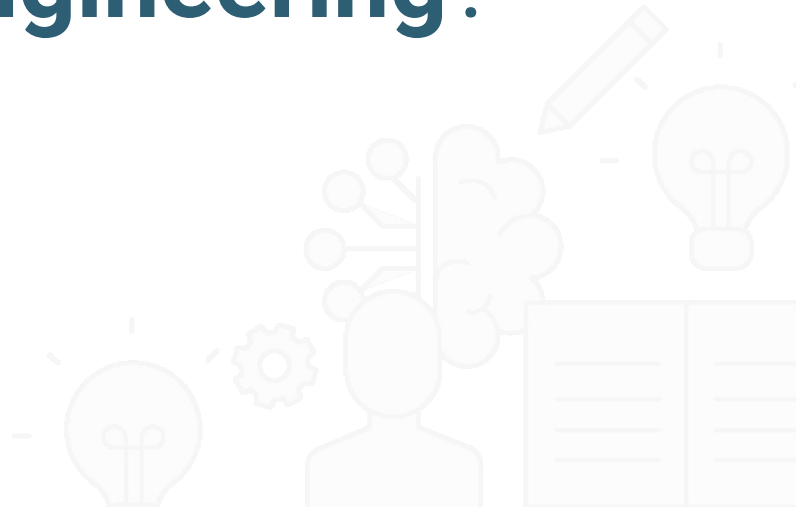
A **prompt** is a set of natural language instructions for an AI to perform a task.

The better the prompt; the better the response.



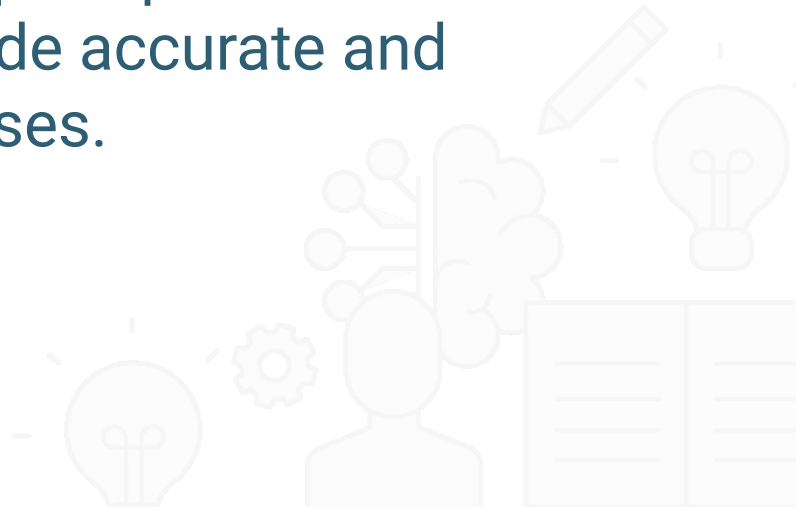


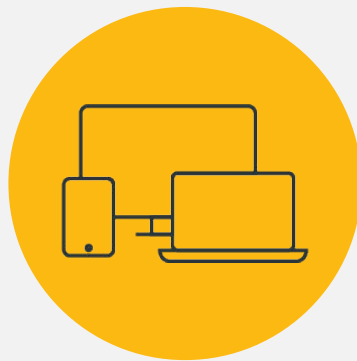
What is
prompt engineering?





Prompt engineering is the newly emerging field of designing and optimizing prompts for AI models to provide accurate and relevant responses.





Instructor **Demonstration**

Mini-Project



Questions?





The End