Introduction to LLMs & Making an AI ChatBot

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Agenda

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What are LLMs?

- Definition: Large Language Models (LLMs) are Al models trained on vast amounts of text to generate human-like responses.
- Key Concepts:
- **Prompt:** User input that guides the model's response.
- **Response:** Al-generated output based on the given prompt.
- **Tokens:** Basic units of text (words, subwords, or characters) that models process.
- Applications: Customer Service, Personal Assistants & Educational Tools



Workshop Prerequisites

Let's set up all necessary tools before we get started!

Step 1	Verify Python 3.9+ & VSCode are installed
Step_2	Create an account for Huggingface to get your API key
Step_3	Paste your API key to the starter file (https://github.com/EthanConstantin/ADS-LLMs-Workshop/tree/main)
Step_4	Confirm the required libraries: requests & huggingface_hub are installed
Step_5	You're all set!

Please raise your hand if you're stuck and we'll assist you!

Live Demo!



02

Building a Basic Chatbot



Live Demo!







Challenge Yourself!

Easy

- Give the ai a personality (Hint: Give the ai a prompt before starting to the conversation)
- Make Command-based responses. (help, about, clear history)
- Show the user that the model is "typing" while it loads

Intermediate

- Track conversation length. Maybe limiting conversation history improves responses?
- Collect the user's personal information

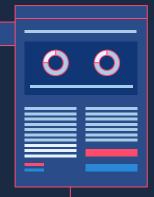
Advanced

- Integrate external APIs to give the AI specialized knowledge
- Store information between sessions
- Sentiment analysis



04

Showcase & Discussion



Let's present our Chatbots!

Any possible improvements?



Thanks for coming:)

Please fill out the form & give us feedbacks!