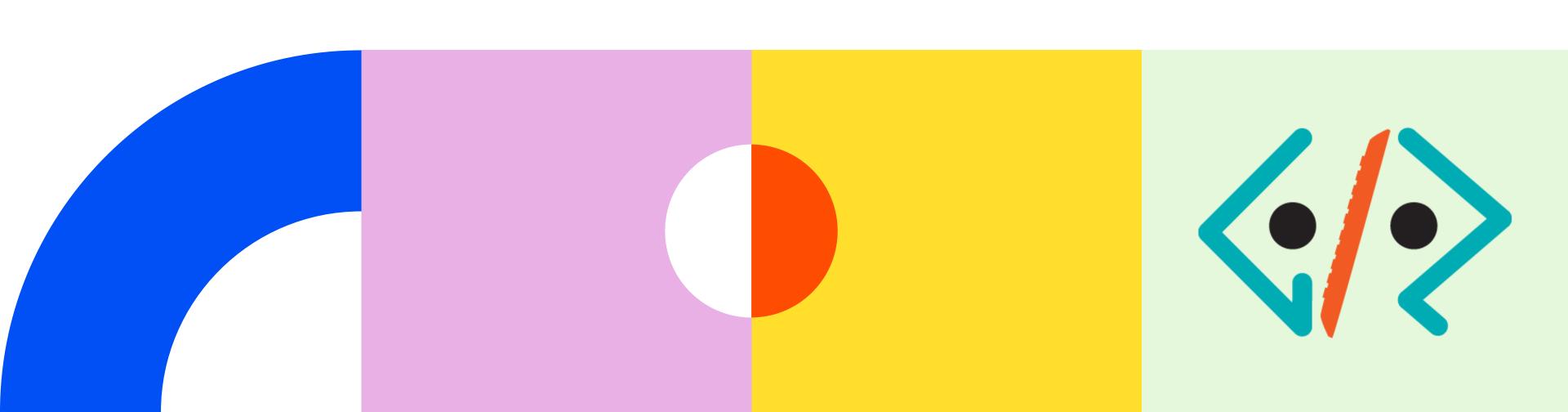
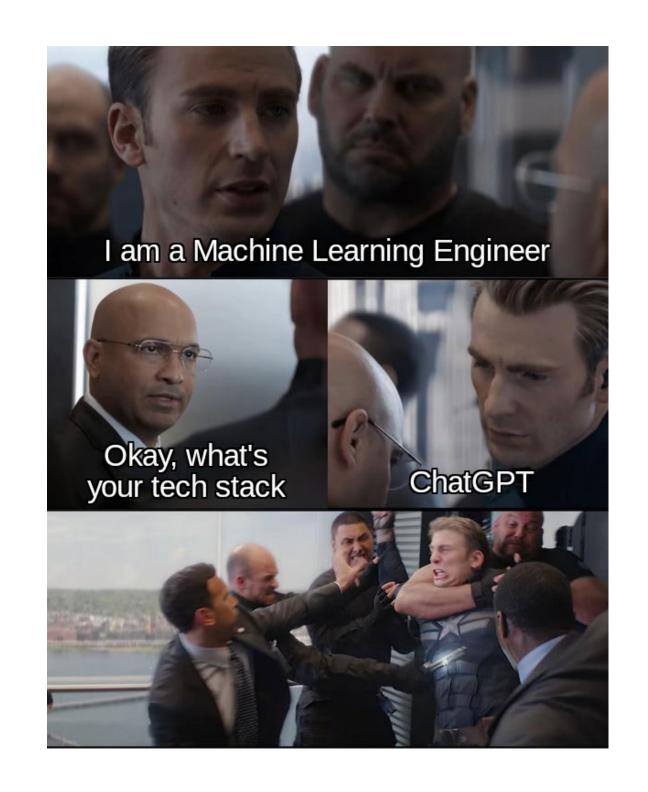
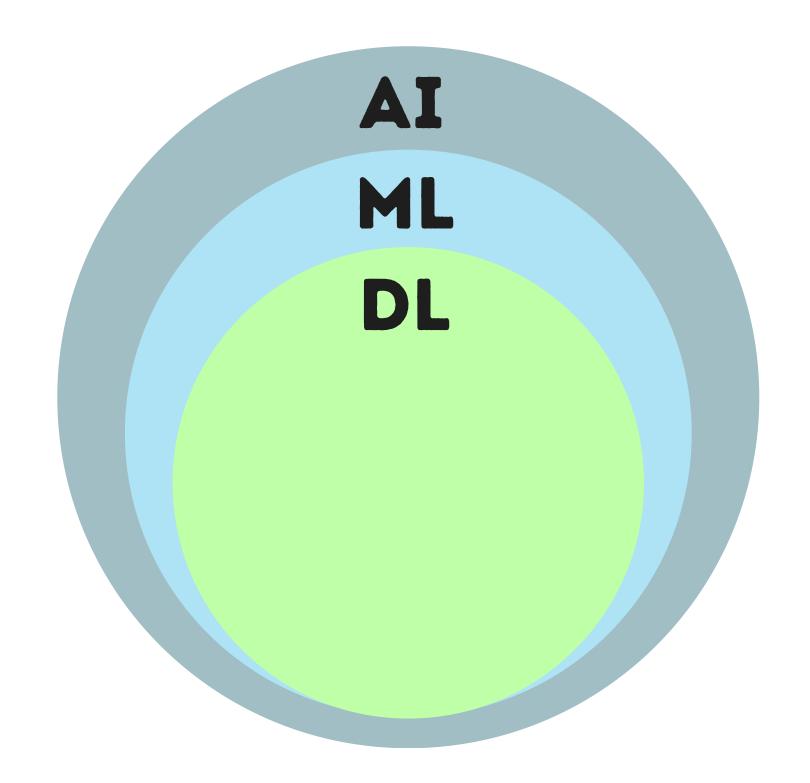
### GET STARTED WITH ML AND GENAI



### WHAT IS THE DIFFERENCE BETWEEN ML AND AI?





#### ARTIFICIAL INTELLIGENCE

A field of computer science that aims to enable machines to imitate human intelligence

#### MACHINE LEARNING

A branch of AI that provides machines the ability to learn automatically

#### DEEP LEARNING

A sub-field of machine learning based on neural networks

#### WHAT ABOUT DATA SCIENCE?

Data science is the study of data to extract meaningful insights for business. It is a multidisciplinary approach that combines principles and practices from the fields of mathematics, statistics, and machine learning to analyze large amounts of data.



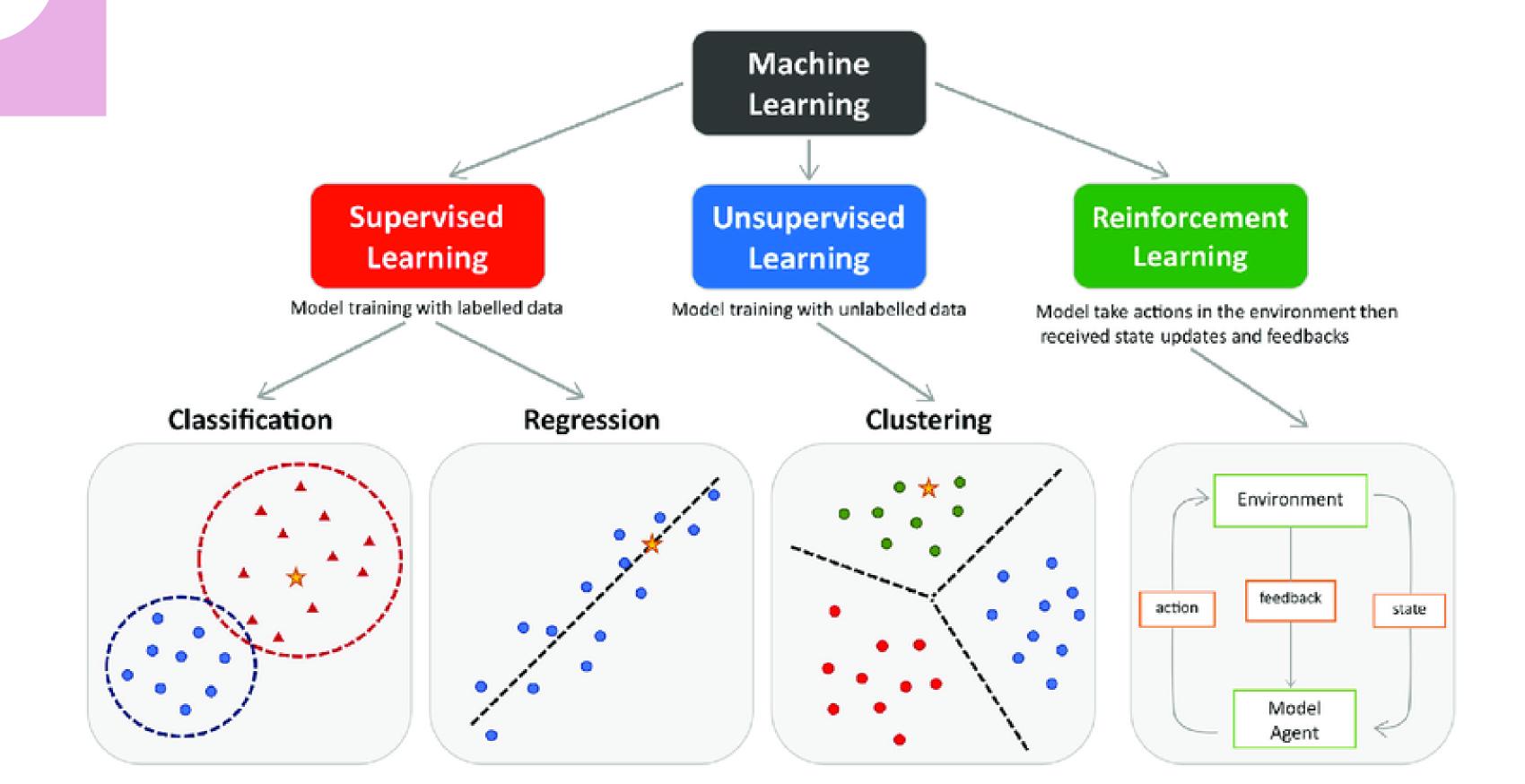
# ML ENGINEER vs AI ENGINEERS

ML engineers design and implement ML algorithms, select models and tune hyperparameters, and integrate ML models into software applications.

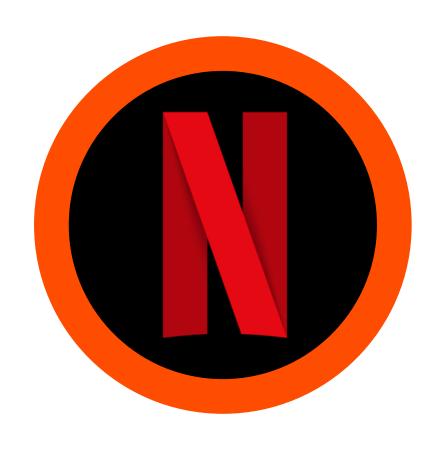


Al Engineers work on the broader aspects of Artificial Intelligence, designing and implementing Al systems, and integrating them into existing workflows.

#### TYPES OF MACHINE LEARNING



### SOME APPLICATIONS OF MACHINE LEARNING



Recommender Systems

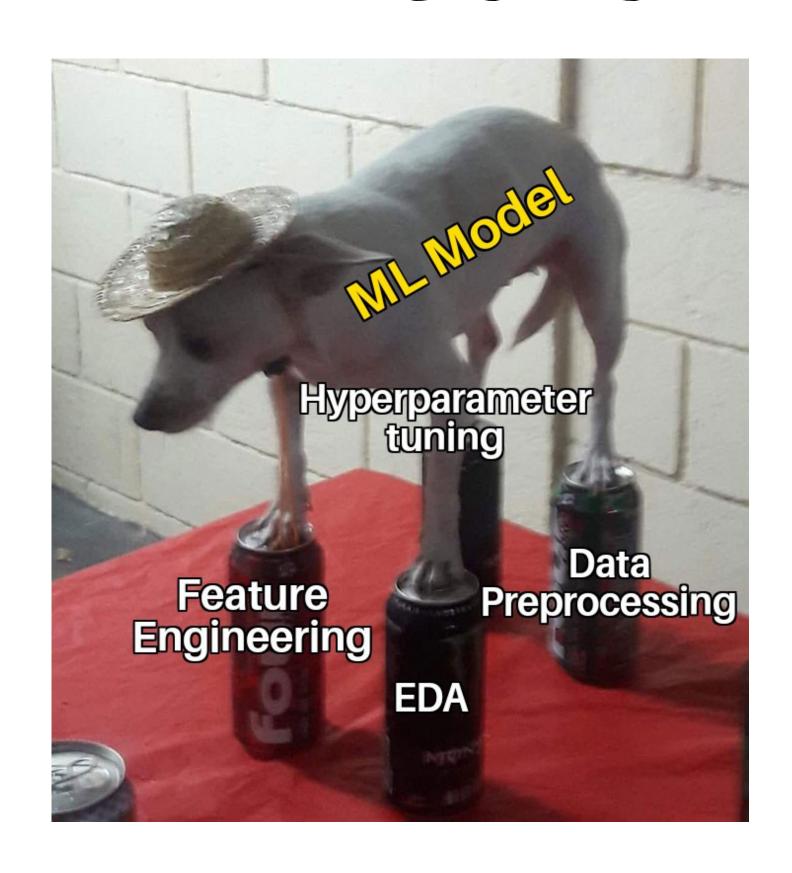


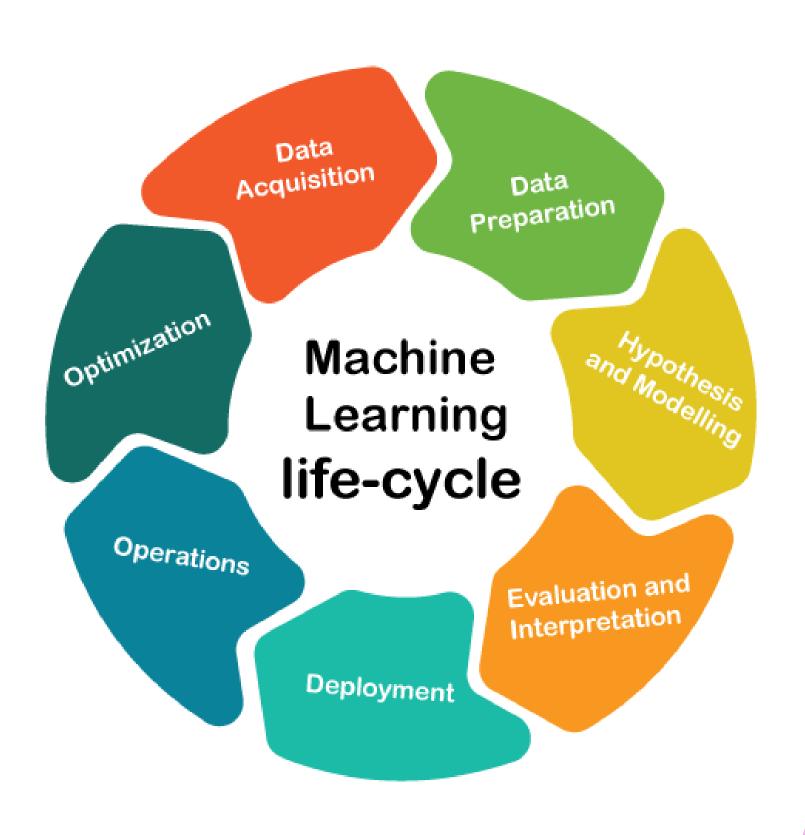
Speech Recognition

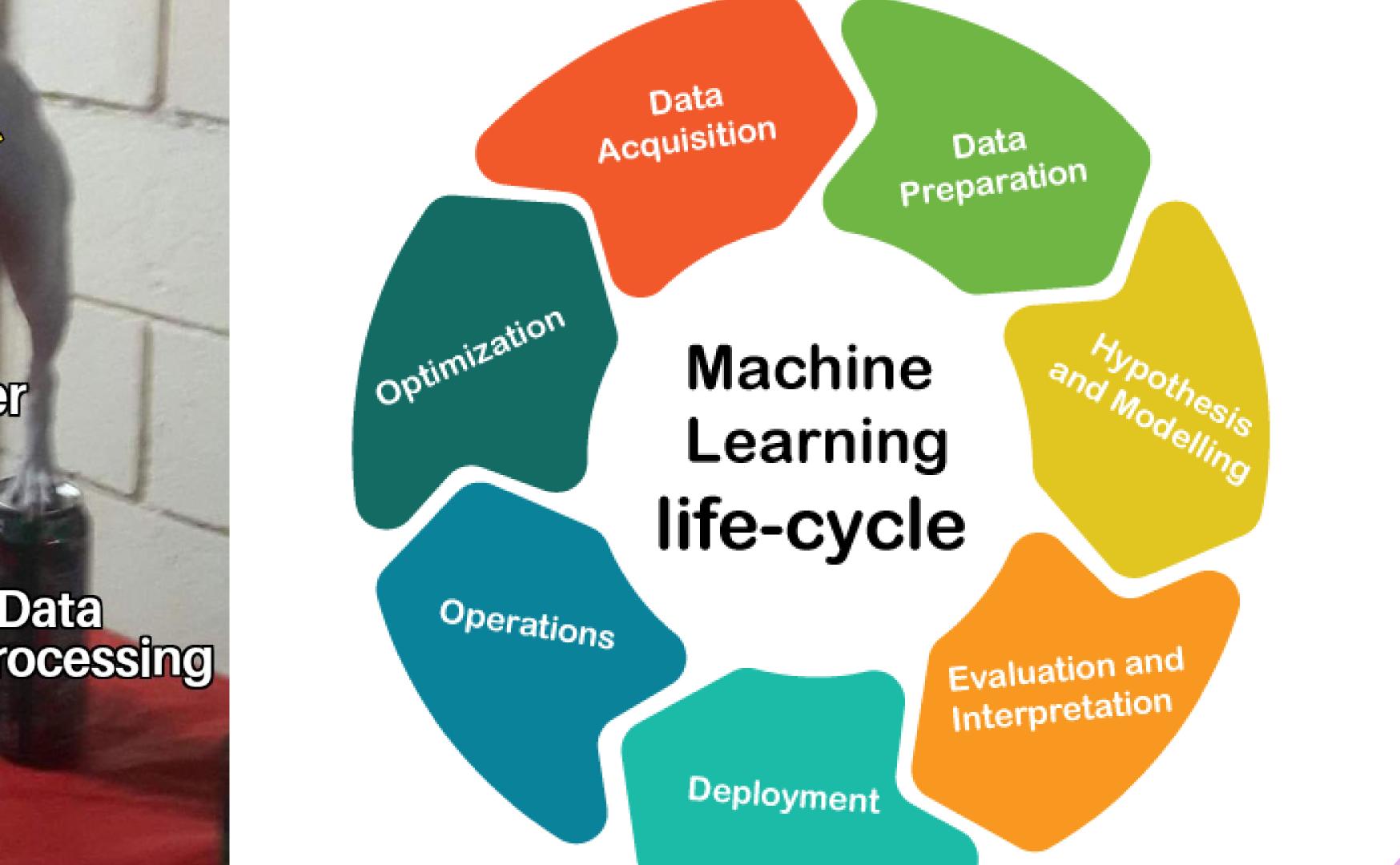


Spam Detection

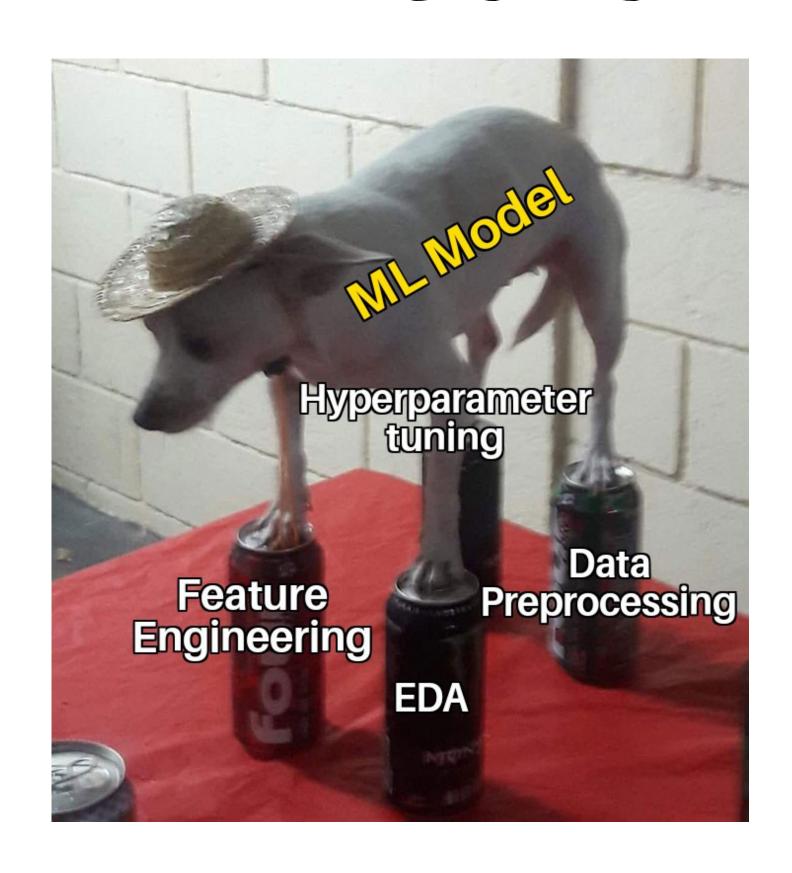
#### ML PROJECT LIFE CYCLE

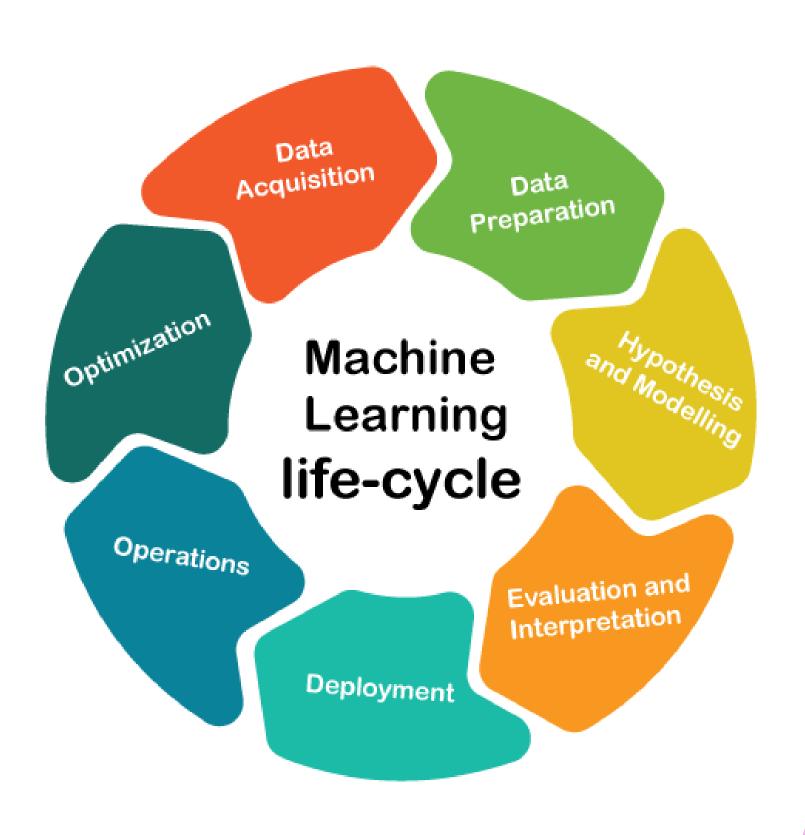






#### ML PROJECT LIFE CYCLE

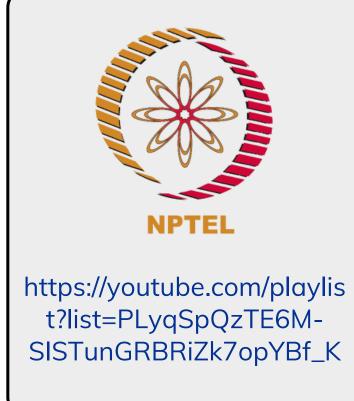




### GET STARTED WITH MACHINE LEARNING



learning-introduction







#### SOME COMMON MISCONCEPTIONS

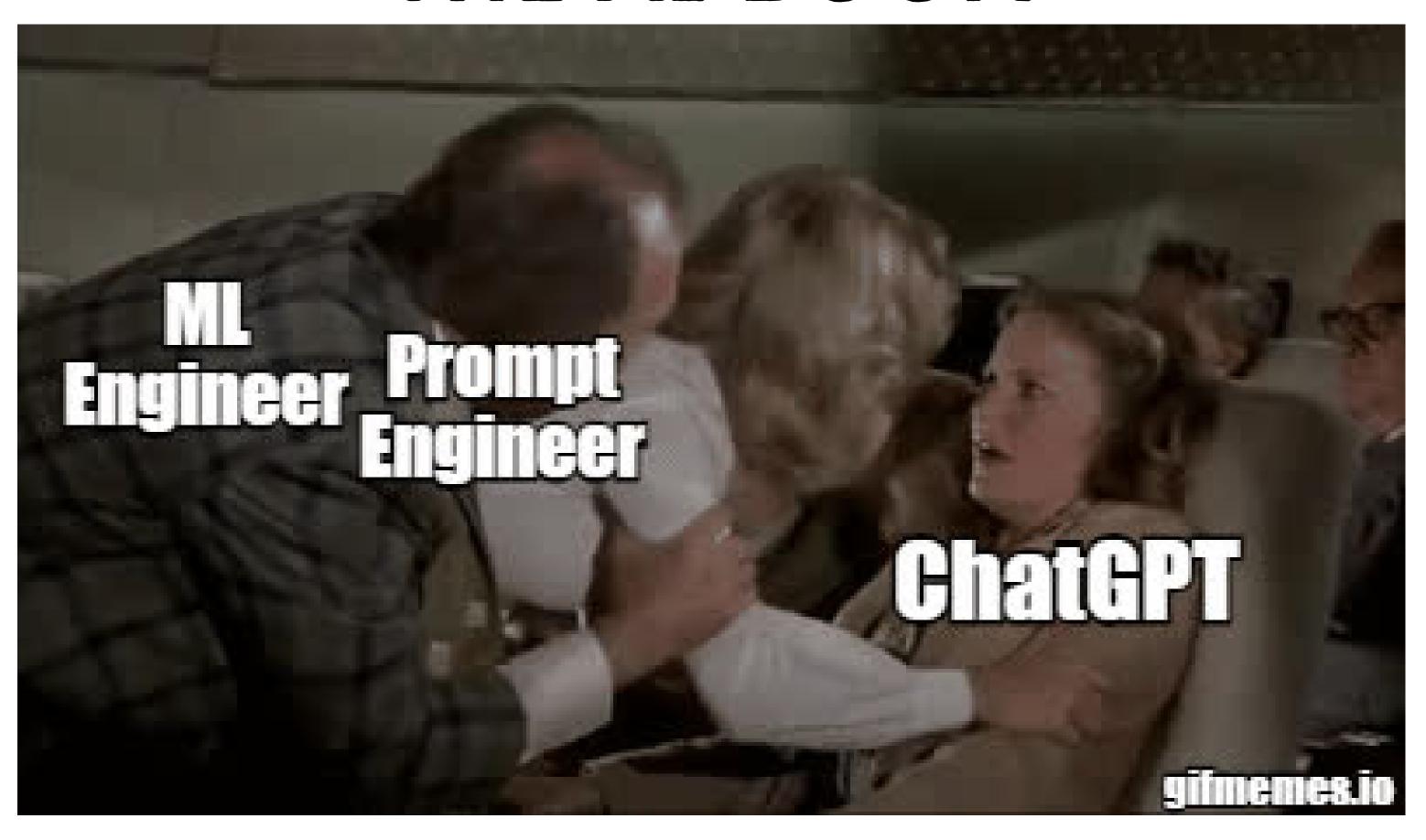




#### LETS TURN TOWARDS AI NOW

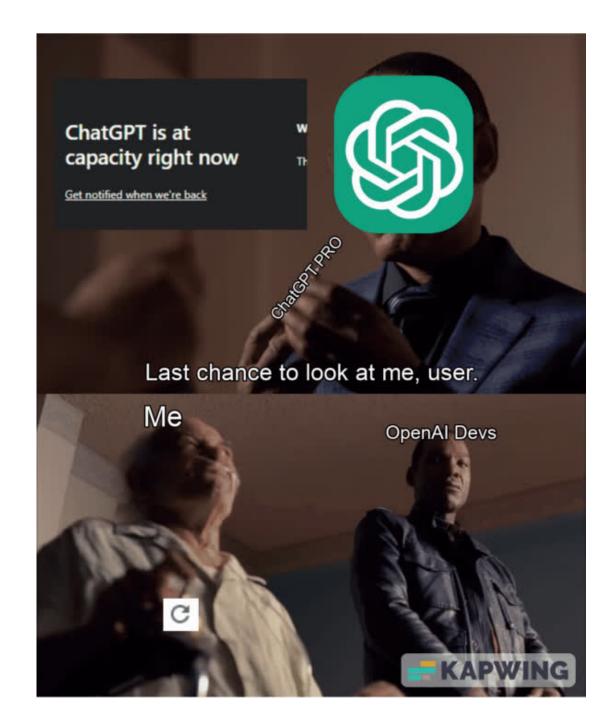


#### THE AI BOOM



#### So, what are LLMs?

- LLMS, OR LARGE LANGUAGE MODELS, ARE LIKE SUPER-SMART COMPUTERS THAT HAVE BEEN TRAINED ON A MASSIVE AMOUNT OF INFORMATION FROM THE INTERNET.
- THEY'VE LEARNED HOW PEOPLE WRITE, TALK, AND EXPRESS IDEAS BY STUDYING TONS OF TEXT, WEBSITES, AND OTHER ONLINE CONTENT.
- SO WHEN YOU ASK THEM A QUESTION OR GIVE THEM A TASK, THEY CAN USE THAT KNOWLEDGE TO UNDERSTAND AND RESPOND IN A WAY THAT MAKES SENSE. IT'S LIKE HAVING A REALLY KNOWLEDGEABLE FRIEND WHO CAN HELP YOU WITH ALMOST ANYTHING, BUT IN THIS CASE, IT'S A COMPUTER!



### PRE-TRAINING VS FINETUNING

PRETRAINING INVOLVES TRAINING A MODEL ON A LARGE CORPUS OF TEXT DATA TO LEARN GENERAL LANGUAGE REPRESENTATIONS AND PATTERNS. THIS INITIAL PHASE HELPS THE MODEL TO GRASP THE COMPLEXITIES OF LANGUAGE AND BUILD A STRONG FOUNDATION OF KNOWLEDGE.

FINE-TUNING REFERS TO THE PROCESS OF FURTHER TRAINING THE PRETRAINED MODEL ON A SPECIFIC TASK OR DATASET, OFTEN WITH A SMALLER AMOUNT OF TASK-SPECIFIC DATA. FINE-TUNING ALLOWS THE MODEL TO ADAPT ITS LEARNED REPRESENTATIONS TO THE NUANCES AND INTRICACIES OF THE TARGET TASK, RESULTING IN IMPROVED PERFORMANCE AND BETTER TASK-SPECIFIC UNDERSTANDING.







## Got Got questions?

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