

L'INTELLIGENCE ARTIFICIELLE EN 2023

18 Octobre 2023

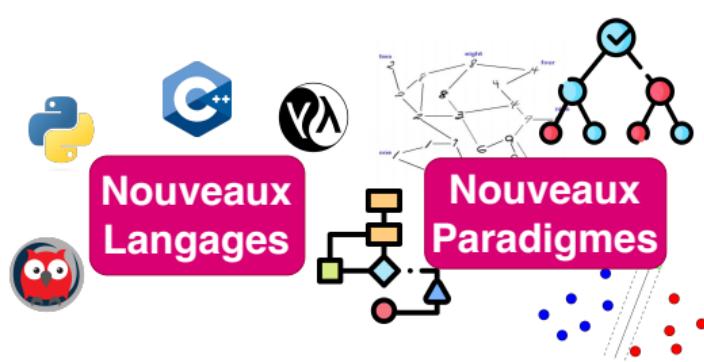
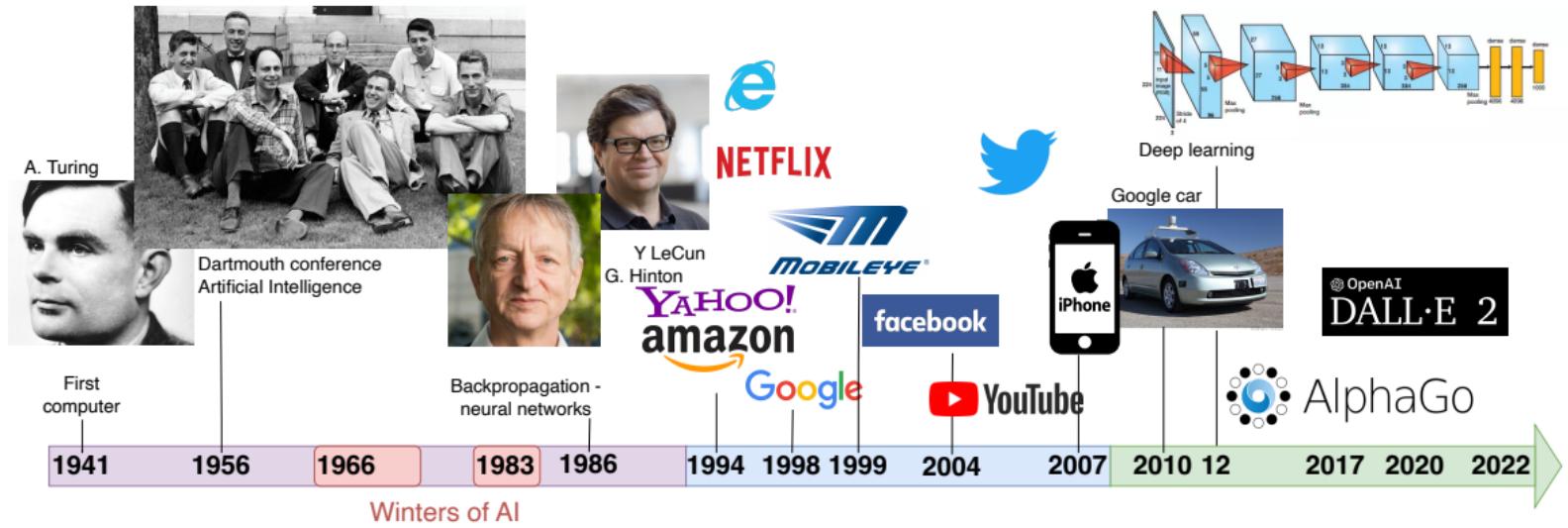
Table ronde ATOS-DELL

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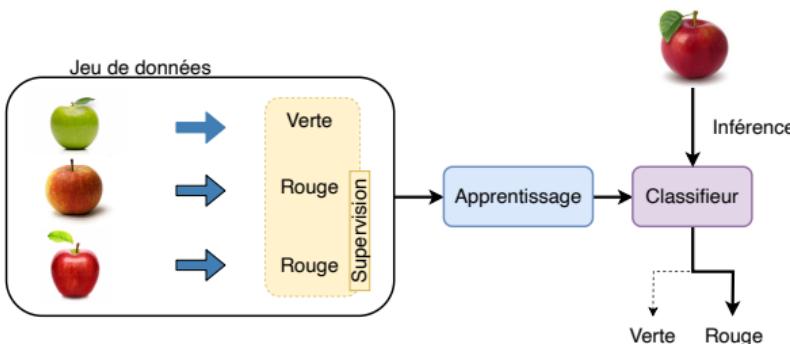
<https://vguigue.github.io>



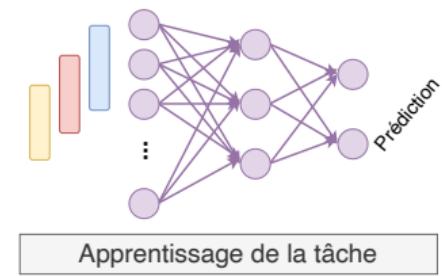
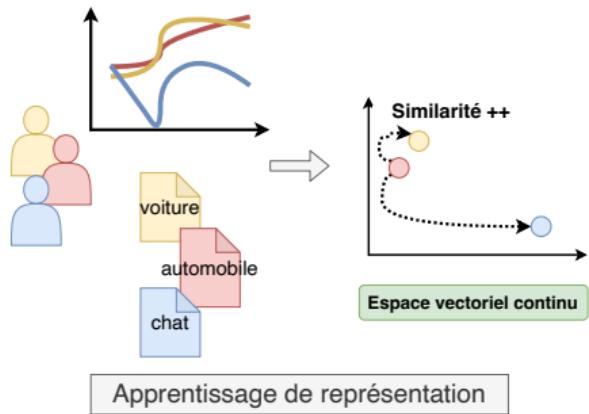


Du machine learning...

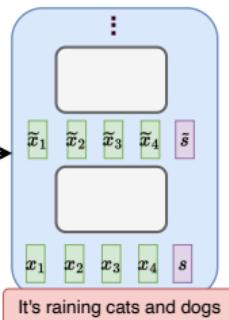
Input (X)	Output (Y)	Application
email	spam? (0/1)	spam filtering
audio	text transcript	speech recognition
English	Chinese	machine translation
ad, user info	click? (0/1)	online advertising
image, radar info	position of other cars	self-driving car
image of phone	defect? (0/1)	visual inspection



... Au deep-learning



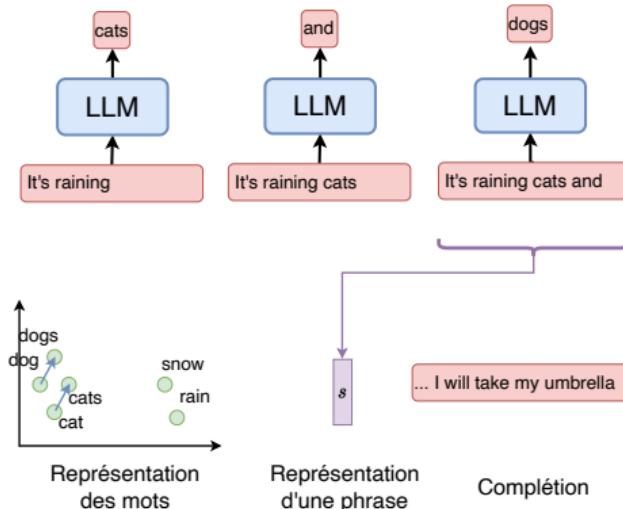
Architecture Transformer



Corpus large



Pré-entraînement



Language Model

Affinage

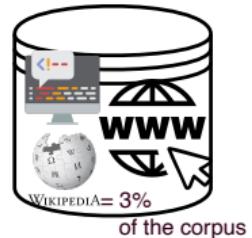


POSITIVE
Great product
NEGATIVE
Worst experience in my life

Sebastian Thrun PERSON started at Google ORG in 2007 DATE, few him seriously. "I can tell you very senior CEOs of major and turn away because I wasn't worth talking to," said Thrun PERSON, no higher education startup Udacity, in an interview with Recode ORG.

María no abofeteó a la bruja verde
 Maria did not slap the green witch
 arg1 relation arg2

chatGPT



Données massives + bien structurées

Modèle géant - LLM

LLM (2017)

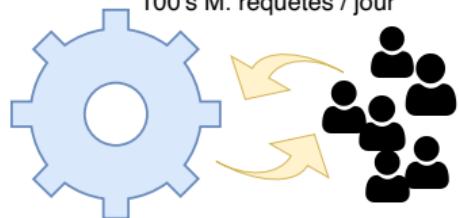


80M param.



175G param.

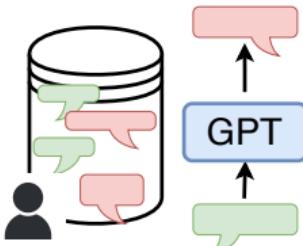
100's M. requêtes / jour



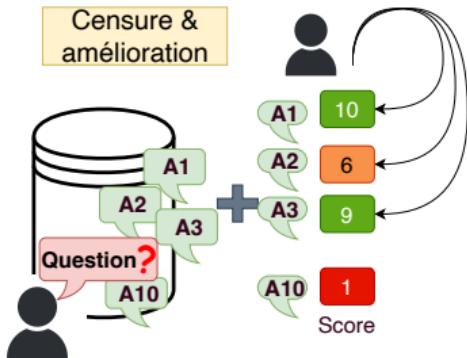
Modèle optimisé / quantifié

Données humaines & interactions

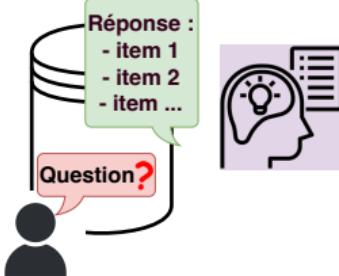
Suivi de dialogue



Censure & amélioration



Structuration des réponses



Dialogue sur code informatique



Savoir le construire

Construction du modèle de base

Maitrise des données

- Collecte/équilibrage
- Nettoyage

Entrainement

- Puissance machine
(milliers de GPU)
- Architecture/recherche ML

Raffinement du modèle

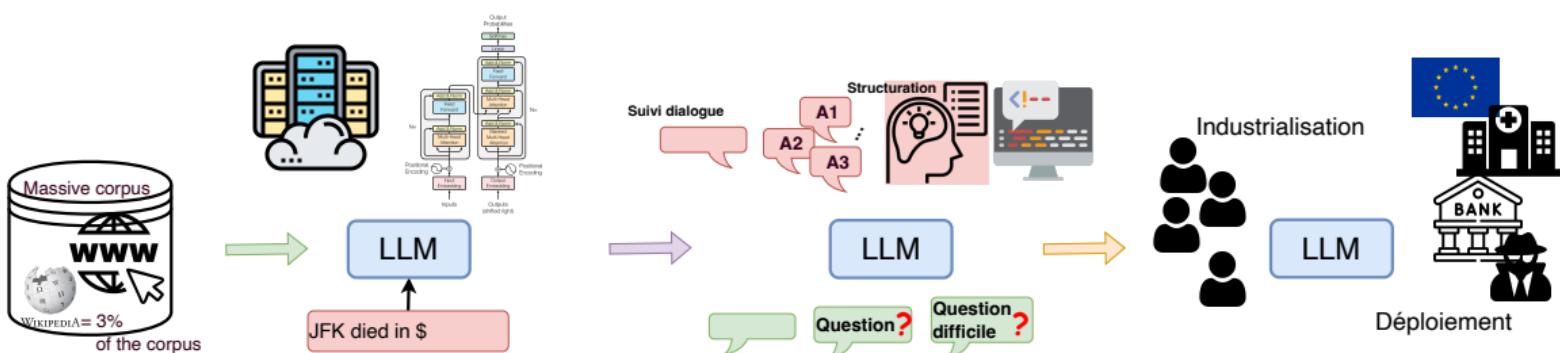
Maitrise & construction des données

- interactions humaines +++
- prix des données
- spécialisation à la demande

Exploitation du modèle

Optimisation / Limitation du coût

- compétences MLOps
- déploiement local



Savoir s'en servir

Fiabilité / hallucinations

Prompting

Biais

Savoir le vendre

Microsoft Tay, Meta Galactica, ...

Modèle imparfait, imprévisible