

4 Days Workshop on **Artificial Intelligence**





Who this workshop is for ?

- Students **exploring whether AI / ML is the right career path**, and want a clear big-picture understanding
- Students **already learning AI / ML**, who want to connect concepts and understand what to focus on next
- Students **planning other tech careers** who need essential AI literacy



Scope of this workshop

01

Classical ML Foundations

Introduction to AI, data pipeline, training and evaluating linear models

02

From ML to LLMs

How we get from classical ML to LLMs, Basics of LLMs

03

Agents & Tools

Tool calling, agentic workflows, integrating models into intelligent systems

04

Context & RAG

Embeddings, vector databases, retrieval-augmented generation project

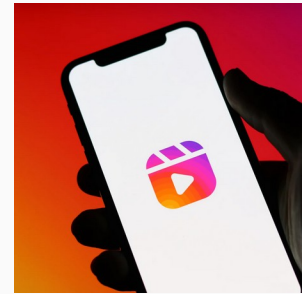
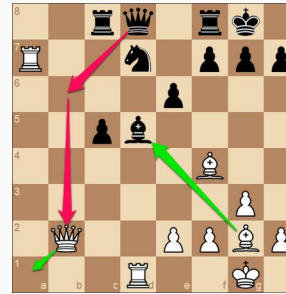


Introduction

Getting Started with AI & ML.

What is Artificial Intelligence ?

- AI is the ability of machines to perform tasks that typically require human intelligence.
- Examples: decision-making, language understanding, vision, robotics.
- Real-world examples: ChatGPT, self-driving cars, chess engines, recommendation systems.

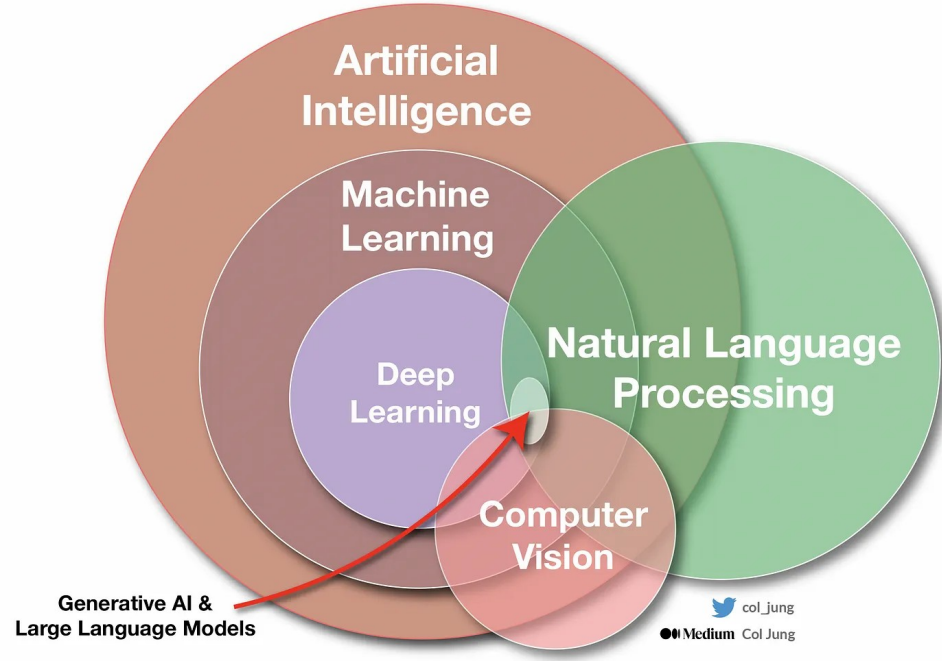




What is Machine Learning ?

- ML is a subset of AI where systems learn from data and experience instead of being explicitly programmed.
- Example: spam detection learns from past emails.

Connection between various ML topics



Basic ML Pipeline

