

Lecture-22 (13/11/24)

Not of relevance

for end sem!

Automated Problem Solving

- ▷ Real World
- ▷ Agent can behave and act
- CSP (Constraint + A.P.S)
- Planning → Actions + Orders
 - POP
 - GIP
 - SAT Plan

→ uncertainty

Bayes Network
→ Fuzzy Logic

Reinforcement Learning

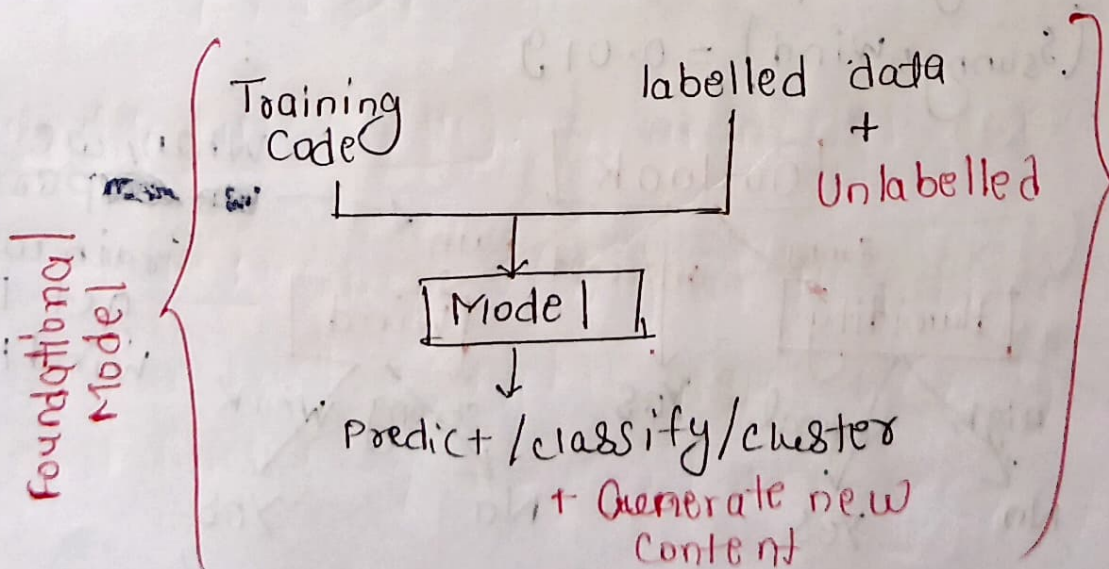
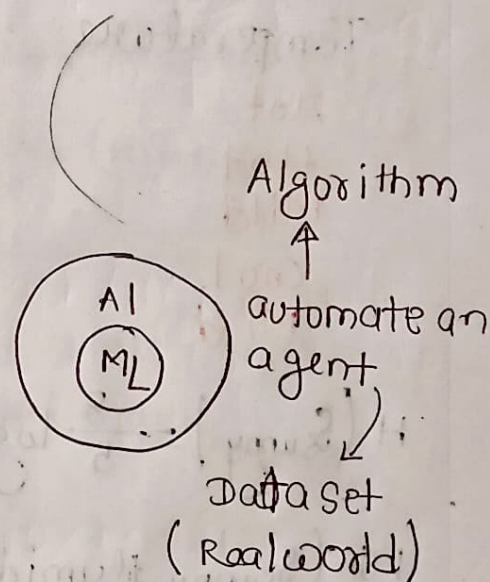
Model

Neural Network

▷ Generative AI

▷ Large Language Models

▷ Other recent advancements



In foundational model, we take a large amount of training data (~~labelled~~ labeled + unlabeled data)

Training data

(self-supervised learning)

$T_1, T_2 \dots T_K$

Downstream task

Foundational model
(Pre-trained)

- ▷ Fine tuning on a task.
- ▷ Advantage is no need to train again and again

$\left\{ \begin{array}{l} \text{Model}_1 \\ \text{on} \\ \text{Dataset}_1 \end{array} \right\}$

We provide a specific "task"

BERT Embedding (Google)

NLP

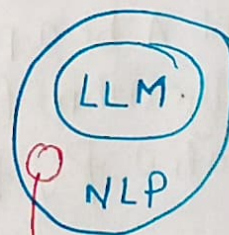
masking the data

I have a pet $\overset{M}{\boxed{\text{dog}}}$

$\boxed{\text{LLM}}$

Trained using Auto-regressive training

understanding
Generation



Agent based planning

▷ Mind 2 web



Assignment of AIS
will have to be submitted
post end semester exam