ta 4 diff ways to look at AI

(i) People who looked at intelligence & how to make machines reason → logical way.

(ii) People who tend to make machines which act like they have reason

(iii) People who tend to make machines have cognition like humans.

iv) People who tried to make machines act like humans.

→ Geometry
- humans can do a lot of geometry just by seeing
- we can easily look & tell what is far & what is near

→ I/P
- started before AI & CV
- IP was done on photos

→ Understanding Images
- ML used to classify objects in Image

Timeline
- object detection way back started in 1950's & still going on
  1960s → digital cameras → Images as numbers can do a lot with numbers

1975 → optimal flow

1985 → Markov random field → data structure

1990s → Comph cuts also face segnation

⇒ Standard tasks.
→ I/P
eg convert clour image to grey-scale find
edges in the image.

→ feature extraction.
↳ you find from image features which you
can throw to NN

⇒ Segmentation
— take image & break it down into pieces

semantic segmentation (supervised)

what region of image represents what object
is annotated by humans.

→ stitching
stich multiple photos. eg panaromic
view or 3D view.

→ Recognition → Detection

→ Captioning
→ Plagirism issues here because AI trained on copyrighted Images & con generator very similar Images.

→ Edge detection

→ what to need to learn CV?
→ Open CV library in python
→ GIMP is image editor like ~~Alot~~ Note but free (open source)

→

Data resources
- MNIST ~~det~~ dataset : handwritten digits.