RECOGNIZE AND CLASSIFY ANIMAL -- NO ANIMAL

Subjects must raise their hand if they see an animal:

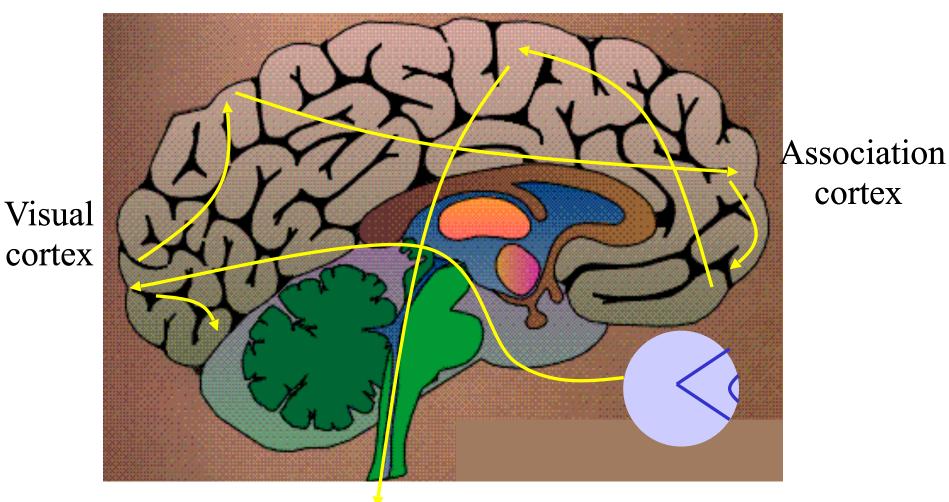
- 60 images
- 1 image per second
- Measure their reaction time.



BRAIN PATHWAYS

Motor cortex

cortex



To motor output

CHALLENGES

Vision involves dealing with:

- Noisy images
- Many-to-one mapping
- Aperture problem
- → Useful information can be extracted by:
- Designing appropriate models.
- Exploiting training databases.
- Combining the two effectively.

OPPORTUNITIES

Cameras are becoming ever more prevalent

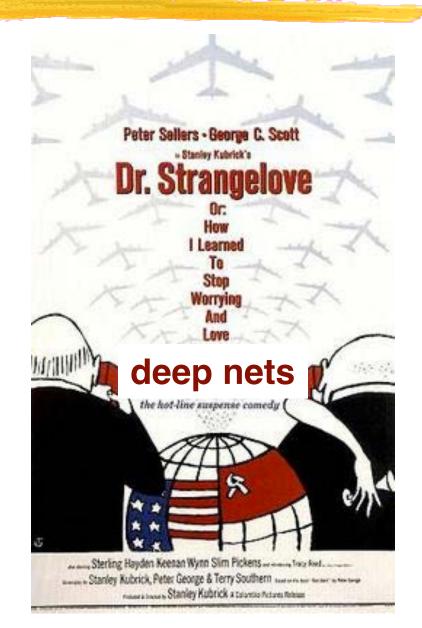
- Tremendous potential for applications.
- A window on the way the mind works.
- → Much work to be done!!!!

DEEP LEARNING REVOLUTION



or

. . . .



TOPICS COVERED

Introduction:

- Definition
- Human vision
- Image formation

Extracting features:

- Contours
- Texture
- Regions

Shape recovery:

- From one image
- Using additional images

EXAM

June 28th from 12:15 to 13:45.

• 1.5 hours.

• 1 two-sided **hand-written** A4 page of notes.

See you then