

# Bandwidth of the optic nerve

- Estimated to be 8960kbps (<https://www.newscientist.com/article/dn9633-calculating-the-speed-of-sight/>)
- ~1.1 megabytes per second
- An uncompressed 640\*480 8-bit RGB image is  $640 \times 480 \times 3$  bytes = 0.92 megabytes

# Neuroanatomy: the striate cortex (aka primary visual cortex or V1)

- Receives information from the LGN, with retinotopic mapping preserved
- Characterised by a layered structure of cells organised into “hypercolumns”
  - Small “receptive fields”
  - Neurons adapted to firing on relatively simple features like edges of specific orientations