

Neural Information Processing 2018/2019

- Structure -

Lecturers:

Conor Houghton (9)

Rui Ponte Costa (9)

Cian O'Donnell (2-4)

Information and probabilistic theory in the brain (lectures 1-6)

1
Information theory (2)
Statistical Learning (2)
Probabilistic Brain (2)

Neural circuits and learning (lectures 7-17)

2
Sensory: Visual system (1)
Deep conv nets (2)
Sensory: Auditory cortex (1)
Recurrent neural networks (2)
Credit assignment/backprop (2)
Reinforcement learning (2)

Neural data analysis (lectures 18-20/22)

3
fMRI/EEG modelling (1-2)
Spike train/Calcium analysis (1-2)
Voltage-based inference (e.g. synaptic) (2)

— — — — — → Useful for
————— → Leads to