

Introduction to ISE Neuroengineering ENGR-E506

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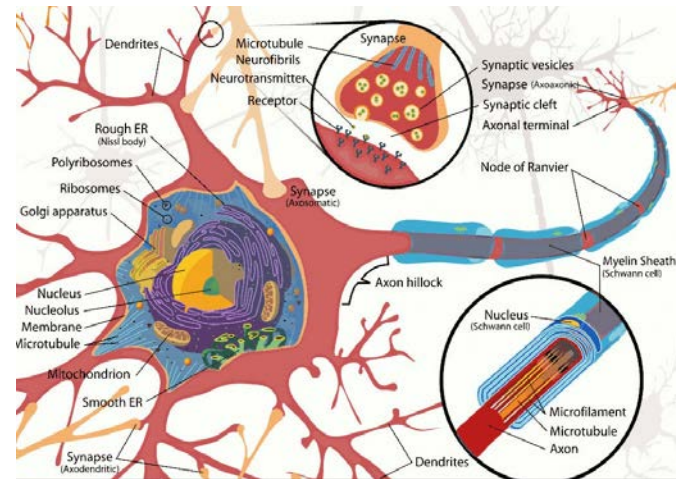
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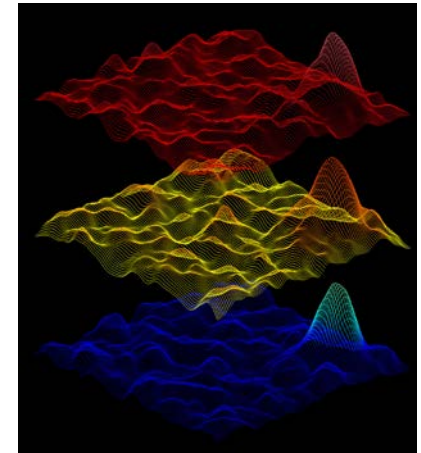
Graphical overview of example topics



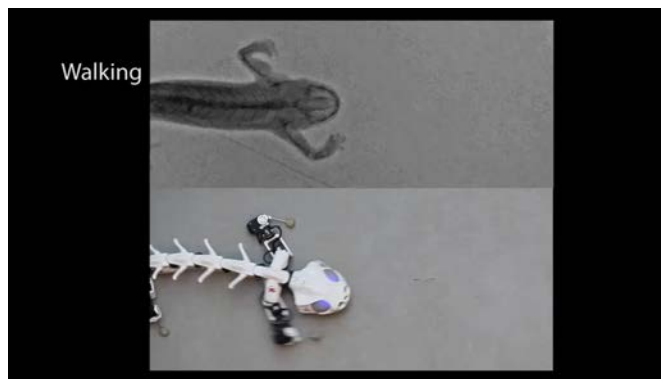
Brain Computer Interfaces



Neurons and synapses



Neural Coding



Locomotion & Control



Neuroimaging



The study of Intelligence

“It would be amazing to be able to invent intelligent machines with no background knowledge.

However our brains do not work like that.

Our best chance to succeed is to start from studying intelligence around us.”

See you in the class ...



Neuroengineering topics to be covered

- Neuroanatomy
- Neurophysiology
- Neurobiology
- Neuronal coding
- Brain Computer Interfaces
- Neuroimaging
- Locomotion
- Visual system
- Deep learning vs The Brain
- Reinforcement learning in the Brain
- Virtual neurosurgery
- Drug delivery and plasticity

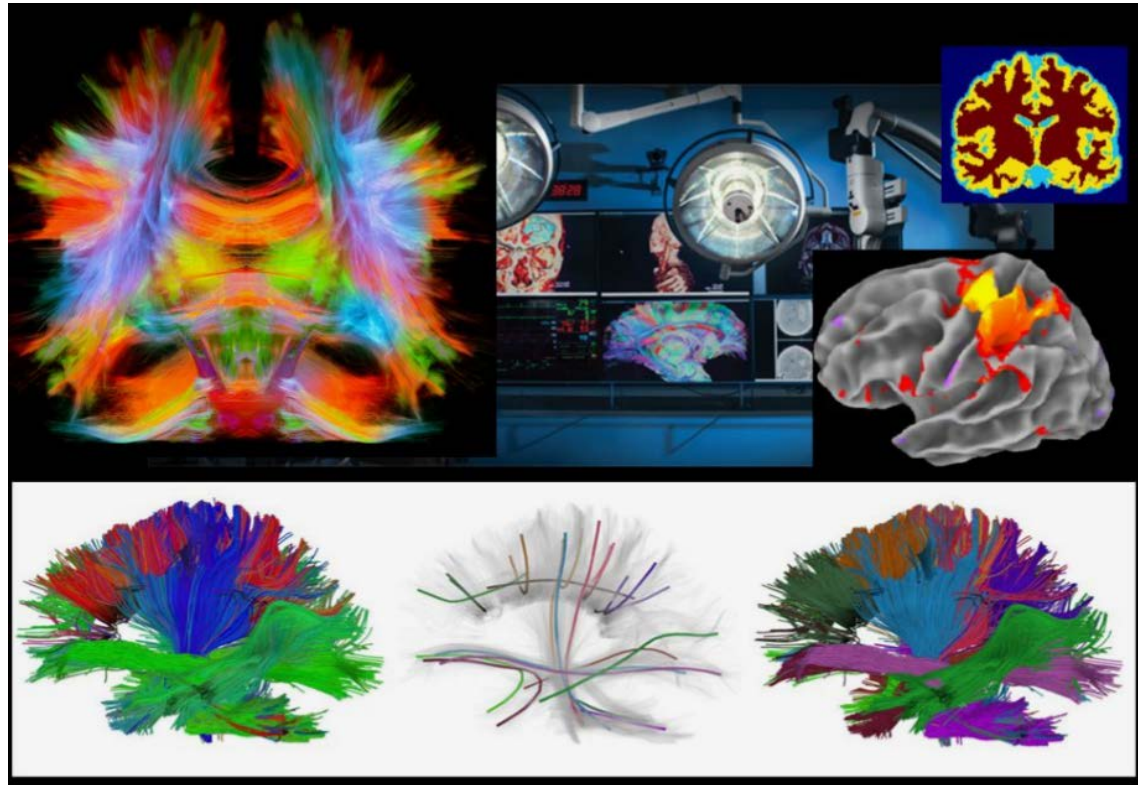


Guest speakers

- Maria Brondesson
- Eatai Roth
- Gregory Lewis
- Feng Guo
- Joshua Brown
- Aina Puce
- Sharlene Newman
- John Beggs



Questions? E-mail me here:
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