How does the Brain make the Mind?

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Review of Week 7

COGS1 – Spring 2019

Midterm 2 in Lecture – Tuesday 5/21
Quiz G – in section during week 8

- Quiz G will be on week 7 reading and lecture material.

| 7
May 14 – 16 | *For Dummies — The Introduction to Neural Networks we all need! (*EC Prereading quiz: opens on TritonEd Monday, May 13 @ 4pm – Tuesday, May 14 @ 10:00am)

#A Six Unit Network is All You Need to Discover Happiness (#Optional reading) | Dr. **Cottrell** (5/14)
Introduction to Neural Networks

Dr. **Boyle** (5/16)
Midterm-2 Review | Quiz F in section
Next week: Midterm 2 – May 21st in class- scantron provided ☺ |

- Midterm-2 is on Tuesday during lecture of Week 8
  - Midterm-2 covers all material from weeks 4 – 6.

Extra-Credit Quiz – Voytek reading-Week 8

| 8 May 21 – 23 | **Midterm-2** Exam in class (5/21) Covers weeks 4-6 Scantron provided. Bring a pencil & UCSD ID | Quiz G in section Midterm 2 – May 21th in class- scantron provided ☺ |

The Unreasonable Effectiveness of Data

Dr. **Voytek** (5/23)
Introduction to Data Science

(*EC Prereading quiz: opens on TritonEd Wednesday, May 22 @ 4pm – Thursday, May 23 @ 10am.)

REVISED
11:33 am, May 13, 2019

Cottrell – Computational Modeling

1. What are the methods that could be used to unravel how the brain works?

2. Why do we need models/modeling in cognitive science? What are the axioms of cognitive science?

3. What are the motivations to study neural nets?

4. How do humans compute? Illustrate with examples.

5. How do biological neural networks differ from machine neural networks?

6. What does a good cognitive model looks like (or how does Dr. Cottrell like to build cognitive models)? How does the neural net for reading work?

7. What is a perceptron?

8. Understand the basics of the training process of a perceptron.

9. What type of problem can a perceptron solve?

10. What type of problem can a perceptron solve?