Syllabus, CSC 191/291/20, Machines and Consciousness (approx. lecture-by lecture, with some slack)

1. Overview. Self-awareness (access consciousness) and phenomenal consciousness. Pinker, Could a computer ever be conscious? (Corry & Alicia)


6. Planning and decision making in robots. Notes by instructor.

7. Continuation of above topics (spill-over).

8. A basic (self-aware) agent. Vere and Bickmore '90

9. Self-motivated agents in the Gridworld. Free will?

10. A glimpse of vision & robotics. McDermott, p.20-27, p.29-46, p.47-64;


15. Libet's delay: p.33-36 of Blackmore Ch.3. Decision making and free will; Libet's lagging will; Wegner & mistaken sense of agency and nonagency: Blackmore ch.6.

16. Blackmore ch.6 (as above) concluded. Animal C. Blackmore ch.8 (to p.124), Baars p.31-33.


20. Robot "emotion". Breazeal & Brooks, ch. 10, Fellous & Arbib


22. McDermott's "computational theory of C". McDermott, ch.3; see also summary p. 215.

23. McDermott’s defense of his model of C. Zombies, color-deprived Mary, inverted spectra, Nagel’s bat, Searle’s Chinese Room, etc. McDermott, ch.4

24. Robots, people, and morality. McDermott, ch.6

**Schedule of assignments**

Thurs. Jan. 23: **Homework 1**, due Wed. Feb. 5, 5pm
  Lisp 1, due Mon. Feb. 10

Tues. Feb. 18: **Homework 2**, due Fri. Mar. 6, 5pm
  Lisp 2: due Fri. Mar. 27, 5pm

Thurs. Mar. 5: **Project teams (1-3 students per team)**, **CSC 291** should be finalized (with TA help, if needed)

Tues. Mar. 24: **Homework 3**, due Wed. Apr. 8, 5pm

Thurs. Apr. 2: **Project proposals** due (1 printed page, single-spaced).

Thurs. Apr. 9: **Homework 4**, due Mon. Apr. 20, 5pm

Thurs. Apr. 23: **Project presentations by CSC 291 teams**

Tues. Apr. 28: **Final noncumulative quiz** (about 20-30 minutes)

**Grading**

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- 4 homeworks (answer questions, write essays)
- 2 staged Lisp exercises (oriented towards "self-awareness")
- several quizzes (a lengthier one at the end)
- Gridworld projects (teams of 1-3)