CMSC 471

Principles of Artificial Intelligence

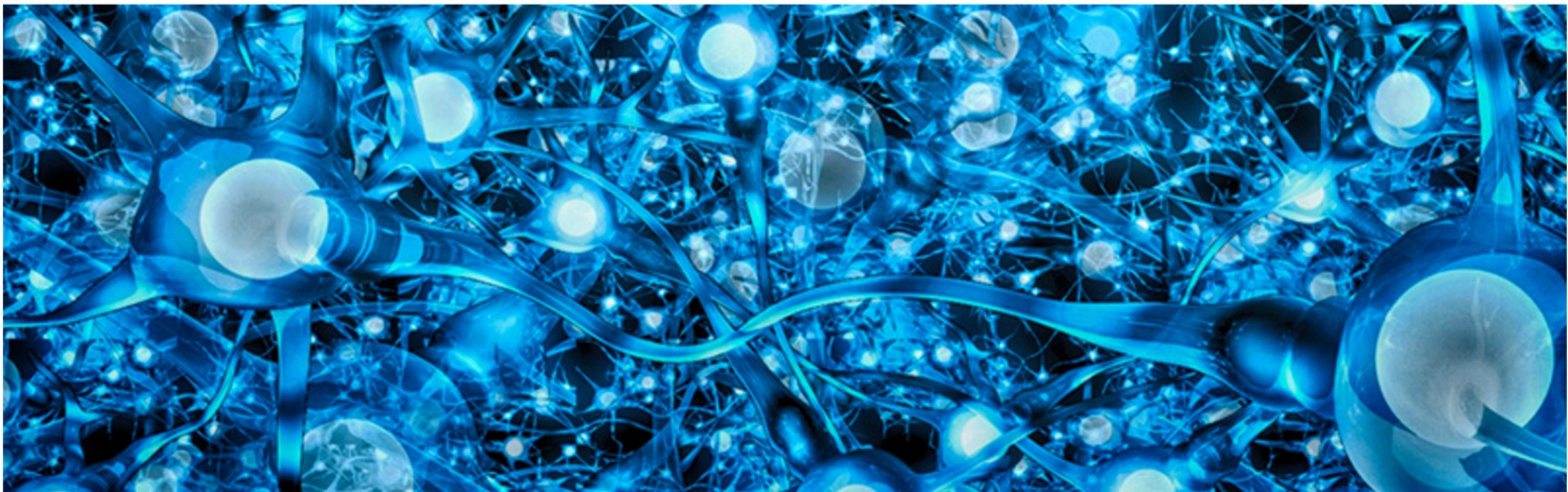**Spring 2016**
Course Overview

Today's class

- Course overview
- Introduction
  - Brief history of AI
  - What *is* AI? (and why is it so interesting?)
  - What's the state of AI now?

http://bit.ly/471s16

UMBC CMSC 471 (01) Spring 2016
Principles of Artificial Intelligence

Home · About · Schedule · HW · Exams · Notes · Code · Examples · Resources · Discussion

This course serves as an introduction to Artificial Intelligence concepts and techniques. We will cover most of the material in our text, Artificial Intelligence: A Modern Approach by Stuart Russell and Peter Norvig, including the agent paradigm in AI systems, search, game playing, knowledge representation and reasoning, natural language processing, expert systems, planning, learning and philosophical issues. See the about 471 page and the schedule for a more detailed breakdown but be aware that the order and timing is subject to change.

When and Where

Mon Wed 4:00pm - 5:15pm PAH 234

AI News
- Microsoft Puts Deep Learning Toolkit Out for ...
- Gary Marcus, A Deep Learning Dissenter, Think...
- Google launches a deep learning course on Uda...
- The Doomsday Invention
- The End of Lawyers? Not So Fast.
- Some scientists fear superintelligent machine...
- Rise of Concerns about AI: Reflections and Di...
- Amazon's stealth takeover of the smart home a...

Homework and grading policies

- Six to eight homework assignments (mix of written and programming)

- One-time extensions of up to a week may be granted **if requested in advance**

- Last-minute requests for extensions probably will not be granted

- *NOTE ON READING: Please do the reading <u>before</u> each class!*

Programming

- Programming assignments in Python
  - We'll use Python in the notes and examples
  - This is a good chance for you to learn Python
- Why not Lisp or Prolog?
- Some assignments may require using other systems
  - E.g., C5 decision tree learning system, Weka Machine learning environment, Prolog, Jess production rule system, etc.

Exams

- Midterm exam
  - In class in mid October
  - About 15% of grade
- Final exam
  - At regularly scheduled time
  - About 25% of grade
  - Comprehensive, but with an emphasis on the last half of material (e.g., 30/70 split)

Instructor availability

- Professor Finin
    - Office hours: by arrangement
    - Drop in whenever my door is open
    - Direct general questions (i.e., those that other students may also be wondering about and that Google can't answer) to Piazza first
    - We will try to respond to postings on the discussion list or private email messages within 24 hours
- TA is Neha Tilak   office hours tbd