# **CS 730/830: Intro AI**

Class Outro

AI at UNH

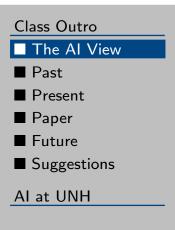
#### Class Outro

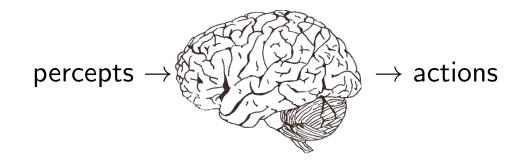
- The AI View
- Past
- Present
- Paper
- **■** Future
- Suggestions

AI at UNH

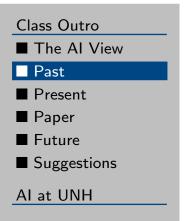
# **Class Outro**

# The Al View of An Agent





### **Past**



- perception: supervising learning (handwriting recognition), unsupervised learning (shape finding)
  [ HMMs ]
- reasoning: constraint satisfaction, propositional satisfiability,
  first-order logic theorem proving
  [ tree search, optimization ]
- **planning**: state-space search, motion planning, domain-independent task planning, planning under uncertainty (MDPs)

[ anytime and real-time planning, reinforcement learning ]

- **learning**: supervised, unsupervised [generative]
- acting: filtering (MCL)
  [ control ]

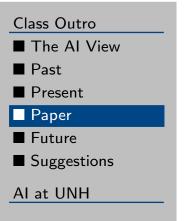
Not: cognitive modeling, NLP, vision, philosophy of mind

#### **Present**

# Class Outro The Al View Past Present Paper Future Suggestions Al at UNH

- Fri May 2: noon-2pm posters no recitation
- Mon May 12 2pm: final papers 2 paper hardcopies, 1 code hardcopy email PDF, tarball, HOWTO given tarball and HOWTO, raw results should be reproducible on agate

# Tips for a Research Paper



- use the standard form: introduction (motivate and define problem, summarize paper), previous work, your approach, experimental results, discussion, conclusion
- write for someone who has taken an Al class but doesn't know anything about your specific problem
- don't just plot results, explicitly describe what they show and the conclusions you draw from them

### **Future**

Class Outro

The Al View
Past
Present
Paper
Future
Suggestions
Al at UNH

■ UNH Al group: usually weekly (Google 'UNH Al group') undergrads have done publishable work sign up for the mailing list!

#### Fall:

■ Ruml: CS 931 Planning (ugrad 799)

■ Begum: CS 733/833 Robotics

■ Carton: CS 750 ML

■ Petrik: CS 751/851 RL

■ Dietz: CS 753/853 IR

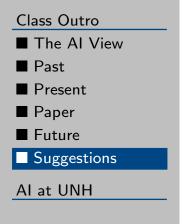
#### Spring:

■ Petrik: CS 757/857 Optimization

■ Carton: CS 759/859 NLP

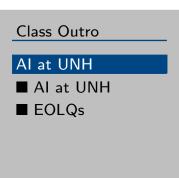
■ Dietz: CS 781/881 KGs and Text

# Suggestions



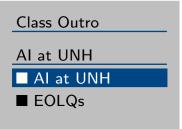
The SEL surveys are important! Your suggestions (especially those that are constructive and concrete) will influence future offerings of this class!

Thank you!



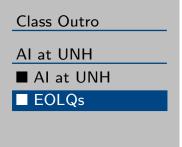
# AI at UNH

#### AI at UNH



- Momotaz Begum: assistive robotics
- Sam Carton: LLM interpretability
- Laura Dietz: Queripedia
- Marek Petrik: robust RL
- Wheeler Ruml: heuristic search
  - situated planning (Devin)
  - greedy search (Steve)
  - beam search (Paige)
  - parallel search (Autumn)
  - greedy search (Mike)





Nope.