CAP6938-02
Plan, Activity, and Intent Recognition

Review of Exam

Instructor: Dr. Gita Sukthankar
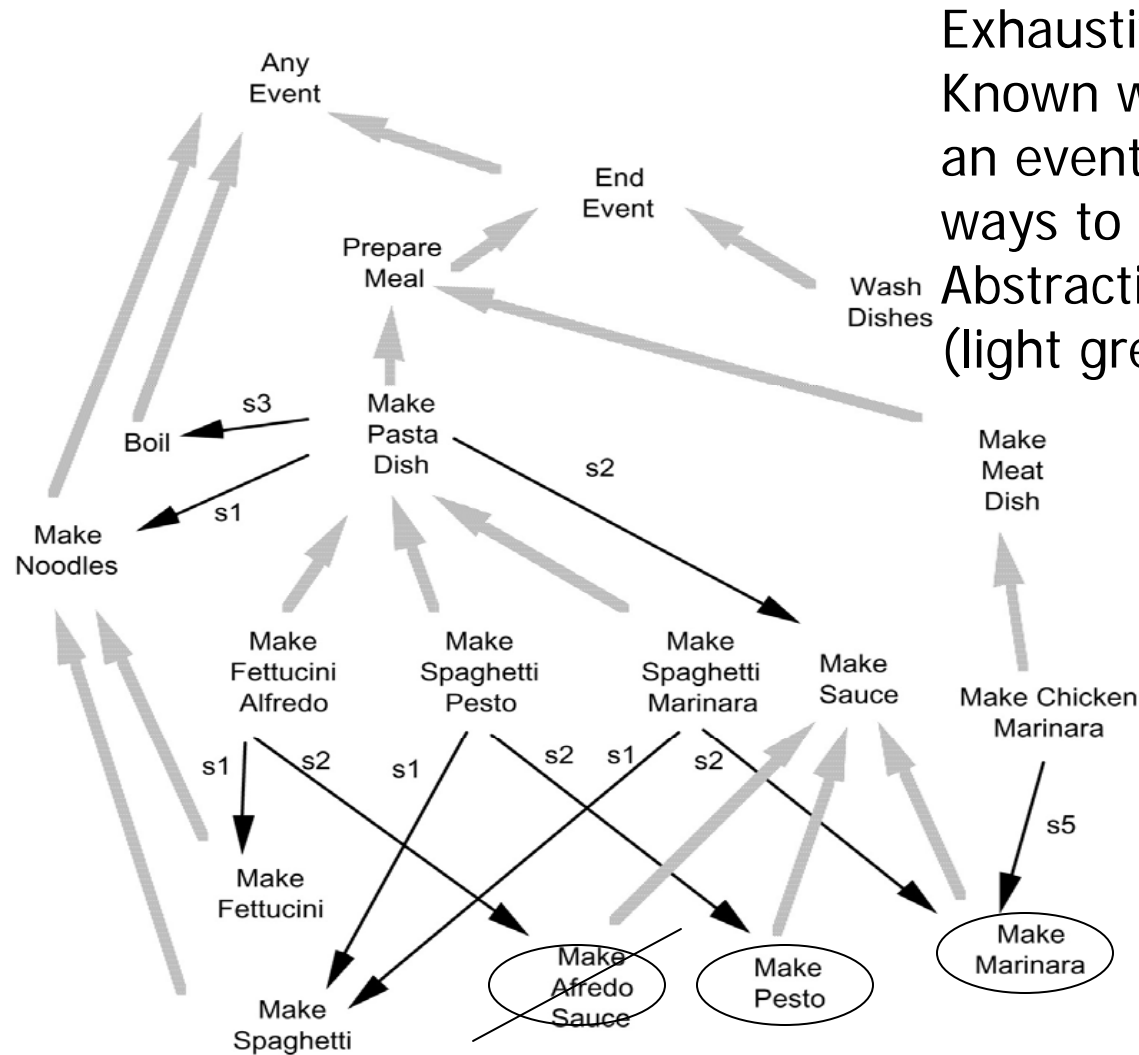Email: gitars@eecs.ucf.edu
Schedule: T & Th 1:30-2:45pm
Location: CL1 212
Office Hours (HEC 232):
T 3-4:30pm, Th 10-11:30am

Event Hierarchy Circumscription

Exhaustiveness:
Known ways of specializing an event type are the only ways to specialize it
Abstraction hierarchy (light grey arrows)

PSDG Grammar

- **Representation has 3 parts**
  - Productions
  - Hidden state (q)
  - Probabilities of executing productions conditioned on q
- **Action selection occurs by randomly choosing a production based on the current q and the probability table.**
- **Strengths/weaknesses:**
  - Strength: representation can be compact
  - Weakness: can be difficult to program

Complete Plan Recognition

- Complete: admit all recognition hypotheses consistent with the history of observations

Marginalization

- When marginalizing remember to multiple each term in the summation by the appropriate prior:

- Example

  - $P(C=1,W=0)=P(C=1|W=0)*P(W=0)$