Overview of Intelligent Software Agents

CS 709

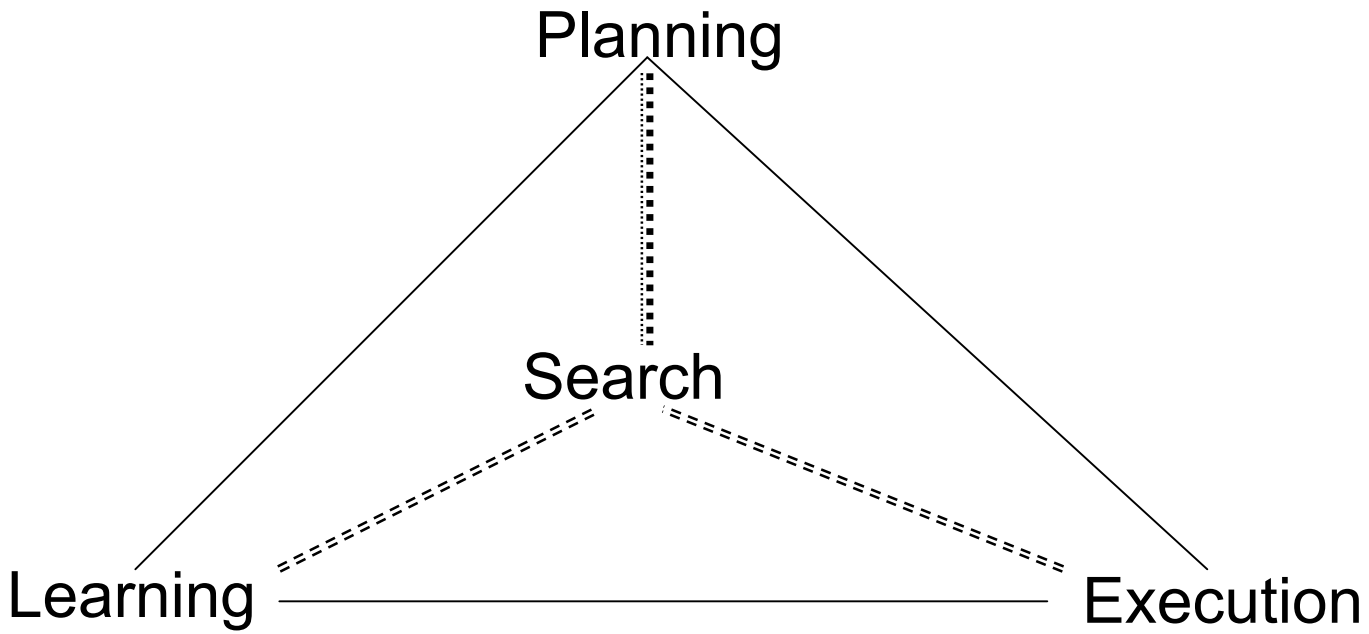
2007

Brief History

- 1940 - 1955: Preliminary foray into creating artificially intelligent entity.
- 1955 - 1985: Specialisation into separate subdisciplines.
- 1985-today: Integration into AI agent.

Properties of an Agent

- Situated in an environment
- Reactive
- Proactive
- Adaptive
- Social


Planning
Search
Learning
Execution

Integration

- Planning & Learning
  - Knowledge Compilation
  - Task Knowledge Acquisition
- Planning & Execution
  - Reactivity
- Execution & Learning
  - Domain Knowledge Acquisition
- Learning & Learning
  - Meta-learning

Our Focus

- Informed Search
- Planning
- Knowledge Compilation