REVIEW

Introduction

- What is AI?
- What can we do with AI?
- Ancestors of AI
- History of AI

Search

- Blind search
  - Breadth-first and uniform cost
  - Depth-first
  - Iterative deepening
- Heuristic search
  - Best-first: greedy, A∗
  - Hill-climbing
  - Simulated annealing
- Constraint satisfaction
- Game playing

Representation and reasoning

- Propositional logic
  - Syntax
  - Semantics
  - Inference
- Predicate calculus
  - Resolution

Uncertainty

- Conditional independence
- Bayesian networks
- Exact inference
- Approximate inference
- Decision theory

Machine learning

- Version spaces
- Decision trees
- Learning ensembles
- Instance-based learning
- Bayesian learning
- Neural networks

Planning

- Representing actions
- Planning as search
- Graphplan