

## Summary of Introductory Lecture: What It's All About

### What is AI?

Operational definition:

Architectures that employ  
Methods enabled by  
Constraints exposed by  
Representations that support  
Models of perception, thinking, action

Examples:

Physical models and representations: molecule (caffeine), built structure (Farnsworth)  
Computational model: river crossing problem  
Architecture: Generate and Test, e.g., with wood samples

What for:

Engineering: build programs  
Science: understand human intelligence, build computational models of human intelligence

### History

Foundations from philosophy, mathematics, economics, computers, control theory, neuroscience, psychology, linguistics

AI, 1956 to present (see Wikipedia "history of AI" for good summary)

### Class Info

★ Representation right = almost done

Rumplestiltskin principle

Simple ≠ trivial