SPRING 2001 LECTURE 1 NOTES

Intro

A wide-ranging view - I think we need new theories; film theory by way of analogy, dealing with raw material, methods/techniques, forms and shapes (genres) and purpose/value. (J. Dudley Andrew, The Major Film Theories, an Intro., 1976, Oxford U Press.)

Go over boilerplate; general course structure, including revisions for this year, and focus on information agents.

Java stuff? Do we need Java intro?

Online readings or packet?

Introductions of students
Why did you take this class?

Important concepts:

-- Computer systems
-- Precise models of Problem Solving and especially Search
-- Embedded, ubiquitous computing
-- Connectivity
-- Autonomy
-- Agency
-- Distribution, multiplicity, diversity, and uncertainty
-- Scale (of modern life and of technology)
-- Architectures of complexity: modularity and patterning
-- Heterogeneity and semantics (Semantic Web)

History of the field (from RIDAI)

-- Pandemonium (Selfridge)
-- AI (1957) esp search and means-ends analysis
-- Production systems
-- Hearsay and BB systems
-- Distributed computing, Actors
-- Distributed AI
-- Contract Net, DVMT
-- Expert Systems
-- The Web
-- Agents and mult-agent systems
-- Connections to other fields e.g. A-Life
  ("alternative possible biologies" - Langton)
-- XML, Java/Jini, CORBA, COM, DOM, .NET,

History of applications:
-- Distributed Sensing
-- Manufacturing
-- Networks/telecommunications management
-- Power management
-- Robotics
-- UI agents
-- etc.
-- Modern: Test agents

Agents to MAS slides

HAM slides.