Roadmap to Computing Topic: Artificial Intelligence

Our next Roadmap Topic is 'Artificial Intelligence.' The introductory talk (~20 minutes) is at

http://vimeo.com/16322159

Below are suggested related topics for research reports. There are many other possible topics. Whichever topic you choose, in addition to identifying and presenting as precisely as possible the core concept of the topic, you may explore its development, social impact, and related controversies, both technical and social/political. If you choose a person, your report and presentation should focus on the contributions of the person to the topic at hand and present biography only as background.

AI programming languages (LISP,

PROLOG) Alan Newell

clustering algorithm

computer Go computer vision datamining

decision tree learning

Deep Blue

Edward Feigenbaum expert system

face recognition software

frame systems

fuzzy/probabalistic logic genetic programming

Herbert Simon

heuristic search

John McCarthy

knowledge engineering knowledge representation

Marvin Minsky

medical expert system

minimax/alpha-beta pruning natural language processing

neural network

ontology

Patrick Winston robot navigation rule-based systems semantic network semantic web Seymour Papert

SHRDLU

support vector machine