

Readings for Artificial Intelligence

CS63 Fall 2007

1. A proposal for the Dartmouth Summer Research Project on Artificial Intelligence, John McCarthy, Marvin Minsky, Nathaniel Rochester, and Claude Shannon (1955). Reprinted in *AI Magazine*, Winter 2006.
2. Computing machinery and intelligence, Alan Turing (1950). *Mind*, Volume 59. **Available online.**
3. Solving problems by searching, Stuart Russell and Peter Norvig (2003). Chapter 3 from *Artificial Intelligence: A modern approach*, Second edition, Prentice Hall.
4. Informed search and exploration, Stuart Russell and Peter Norvig (2003). Chapter 4 from *Artificial Intelligence: A modern approach*, Second edition, Prentice Hall.
5. Genetic algorithms: An overview, Melanie Mitchell (1996). Chapter 1 from *An introduction to genetic algorithms*, MIT Press.
6. Adversarial search, Stuart Russell and Peter Norvig (2003). Chapter 6 from *Artificial Intelligence: A modern approach*, Second edition, Prentice Hall.
7. A gamut of games, Jonathan Schaeffer (2001). *AI Magazine*, Fall 2001.
8. Neural networks: Fundamentals and the back propagation model, Toshi-nori Munakata (1998). Chapter 2 from *Fundamentals of the new Artificial Intelligence: Beyond traditional paradigms*, Springer-Verlag.
9. A neural network primer, Thomas Schultz (2003). Pages 44–73 of Chapter 2 from *Computational developmental psychology*, MIT Press.
10. Temporal difference learning and TD-Gammon, Gerald Tesauro (1995). *Communications of the ACM*, Volume 38, Number 3.
11. The fundamental problems of classical AI and Cognitive Science by Rolf Pfeifer and Christian Scheier (1999). Chapter 3 from *Understanding Intelligence*, MIT Press.

12. The symbol grounding problem, Stevan Harnad (1990). *Physica D*, Volume 42. **Available online.**
13. Vehicles: Experiments in synthetic psychology, Valentino Braitenberg (1984). Chapters 1-6, MIT Press.
14. Intelligence without representation, Rodney Brooks (1991). *Artificial Intelligence*, Volume 47. **Available online.**
15. Using emergent modularity to develop control systems for mobile robots, Stefano Nolfi (1997). *Adaptive Behavior*, Volume 5, Number 3–4. **Available online.**
16. An incremental approach to developing intelligent neural network controllers for robots, Lisa Meeden (1996). *IEEE Transactions on Systems Man and Cybernetics*, Volume 26, Number 3. **Available online.**