

Automata Theory and AI: An Introduction

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Automata Studies

Automata studies (1956)

Edited by: C. E. Shannon and J. McCarthy

The Chomsky hierarchy and automata

- Three models for the description of language (1956)
- On certain formal properties of grammars (1959)

AI

- Symbolic AI (John McCarthy)
- Behavioral AI (Rodney Brooks)
- Agentive AI (DeepMind)

Agentive AI

- Intelligent agents for Atari
- Deep learning (Geoffrey Hinton)
- Reinforcement learning (Richard S. Sutton and Andrew G. Barto)
- Deep reinforcement learning: deep Q-network (DQN) agents: DeepMind (2013)

Cellular automata (John von Neumann)

- Conway's Game of Life
- Boids (Craig Reynolds)
- Langton's ant

Sugarscape

From Artificial Life to Artificial Societies

Agent-based modeling for cellular automata