

COMP 6721 - Artificial Intelligence

Overview of AI

Question 1 Look up these events on the history of AI and indicate the year that they occurred. Feel free to browse the Web and read here and there about AI.

- 1) The MNIST dataset, the benchmark to evaluate handwriting recognition, is made public.
- 2) The term “Artificial Intelligence” is first used.
- 3) Libratus wins against top players at poker.
- 4) The robot Shakey, programmed in LISP, resulted in the development of the A* search algorithm.
- 5) Minsky & Papert publish a book that shows the limits of perceptrons and argue for more work in symbolic computation.
- 6) Google launches its Neural Machine Translation system based on recent advances in neural networks.
- 7) Minsky develops the Frames to reason with world-knowledge. Years later, frames turned out to be the basis of object-oriented programming.
- 8) The expert system MYCIN is developed and its recommendations are often better than those of human experts.
- 9) The METEO machine translation system, developed at the University of Montreal, is deployed at Environment Canada to translate weather forecasts from English to French.
- 10) The AlexNet system, developed at the University of Toronto, wins the ImageNet Challenge and shows that deep learning techniques can achieve significantly better results than classical machine learning techniques in image processing.
- 11) Joseph Weizenbaum develops the first chatbot.
- 12) Douglas Lenat starts the development of the Cyc project to allow common sense reasoning.
- 13) In search for a PhD project, two students from Stanford University develop the Google search engine.
- 14) Chinook, developed at the University of Alberta, wins against Don Lafferty at the game of checker.
- 15) Alain Colmerauer, who was professor at the University of Montreal for a few years, develops a programming language based on logics.

- 16) The first edition of the RoboCup Challenge, robots trying to play soccer, takes place.
- 17) DARPA organises the first Grand Challenge to test autonomous vehicles.
- 18) Netflix initiates a competition in machine learning to beat its own film recommendation system.
- 19) AlphaGo beats the world's champion at the game of Go.
- 20) Terry Winograd, the PhD supervisor of Larry Page, develops a system that understands English instructions.