Lee Beadle

CS 470

Quiz #6

Expert Systems

1. Mycin
   1. 1972.
   2. Edward Shortliffe, Bruce G. Buchanan, Stanley N. Cohen.
   3. Stanford University.
   4. Medicine.
   5. Identify bacteria that can cause infections, and based on that identification, make recommendations for the proper antibiotics.
2. Dendral
   1. 1965.
   2. Edward Feigenbaum, Joshua Lederberg.
   3. Stanford University.
   4. Chemistry.
   5. A system used to analyze chemicals and predict their corresponding molecular structure.
3. SID (Synthesis of Integral Design) (VAX 9000)
   1. 1981.
   2. Unknown.
   3. Digital Equipment Corporation.
   4. Logical Circuits.
   5. Used for the synthesis of logical circuitry design.
4. PROSPECTOR
   1. 1974
   2. Duda, Hart, Nilsson, Reboh, Slocum, Sutherland, and Gasching
   3. Artificial Intelligence Center.
   4. Geology.
   5. Help geologists discover mineral formations.
5. XCON/R1
   1. 1978.
   2. John P. McDermott.
   3. Digital Equipment Corporation.
   4. Production.
   5. Enforced what modifications are necessary to customer ordered computer systems.
6. Eliza
   1. 1966.
   2. Joseph Weizenbaum.
   3. MIT.
   4. Language processing.
   5. Simulated real conversation between people using pattern matching and analysis.
7. INTERNIST
   1. Early 1970s.
   2. University of Pittsburgh.
   3. University of Pittsburgh.
   4. Medicine.
   5. Diagnosis of internal medical issues based on symptoms.
8. Emycin
   1. 1984.
   2. Buchanan, Shortliffe.
   3. Stanford University.
   4. Medicine.
   5. A variation of Mycin that removes the knowledge of infection blood diseases.
9. GPS (General Problem Solver)
   1. 1957.
   2. Newell, Simon, Shaw.
   3. Carnegie Mellon University.
   4. Puzzle and problem solving
   5. Solved human puzzles with trial and error approaches.
10. CaDet
    1. 2006
    2. Fiona Gilbert
    3. Cancer Research UK
    4. Medicine.
    5. Provide physicians with data patterns that can help serve in early cancer detection.

Reference:

<https://www.britannica.com/technology/MYCIN>

<https://www.britannica.com/technology/DENDRAL>

<https://dev.to/lschultebraucks/a-short-history-of-artificial-intelligence-7hm>

<https://www.sri.com/work/publications/prospector-computer-based-consultation-system-mineral-exploration>

<https://www.scribd.com/doc/40730663/XCON>

<https://en.wikipedia.org/wiki/ELIZA>

<http://people.dbmi.columbia.edu/~ehs7001/Clancey-Shortliffe-1984/Ch8.pdf>

<https://books.google.com/books?id=qhHsSlazGrQC&pg=PA368&lpg=PA368&dq=emycin+expert+system&source=bl&ots=TjMl1CvgGo&sig=xVlh7-rFaaNtyHmoUCzXLm8dO1U&hl=en&sa=X&ved=0ahUKEwjB4tCY9NrZAhXM61MKHbTrA8UQ6AEIcjAJ#v=onepage&q=emycin%20expert%20system&f=false>

<http://scienceblog.cancerresearchuk.org/2008/10/02/the-cadet-trial/>