

SUMMARY

WHY

WAT IT HAS DONE AND WAT IT IS EXPLAINING

MATTER IN THE PAPER MAIN DIVISIONS

PROCESS OF WORK

FINAL FEELING ABOUT THE PAPER

Title : In the game: The interface between Watson and Jeopardy!

Summary

The Artificial Intelligence was being shown a tremendous traction by the IT giants. As to stay on the track and keep AI updated, IBM has come up with a system named “IBM Watson”.

IBM Watson is especially designed to master the television game show “Jeopardy”. Soon after Watson was designed it brought a huge revolution in this game by successfully defeating the current champions of Jeopardy. This paper discusses the behaviour and the total work flow of the Watson in the “Jeopardy” game show.

The paper can be abstractly divided into three categories, they are “Selecting and reading a clue”, “Ringing in” and “Delivering the response”. The first two categories can be considered as the most important ones to crack the game successfully and the third category uses the TTS (Text to Speech) system developed by IBM.

The Architecture of IBM Watson has a “DeepQA engine”, “Avatar”, “Electromechanical button press” and “Controller” connected to the “Jeopardy game Control System” via Ethernet. The DeepQA engine acts as the brain of the Watson to store a huge structured and unstructured data about a wide range of topics. The DeepQA engine will start searching for the answer when a clue is read by the Controller and hits the Electromechanical button when the DeepQA engine gives out a confident answer. When Watson rings in before the time by pressing the buzzer, the Watson is permitted to deliver the answer. The answer is delivered through the audio system of the only visible part of Watson called as the Avatar. The TTS system is used for delivering the response or selecting a clue to communicate and pronounce as a human being.

Overall, the IBM Watson is very efficient system using the Artificial Intelligence with an impressive architecture and configuration to serve the purpose of its invention, the Jeopardy game show !

Critical Discussion (Strengths/Weakness/Interesting/Relatedness)

The paper was well versed on the subject of interface and it took care of most of the essential points like triggering the buzzer, computing the strategy, and getting the question and scoreboard in the form of electronic message.

But there is a blind spot, that the Jeopardy system does not give out the answer from the other players to the Watson. This is one of the important tasks, because when the system knows about the answer, it can compute the knowledge base results and cache the results for every question in the category which will be very helpful to answer the next questions in the category.

Watson can improve its responsiveness if it has speech to text conversion system.

“Ringing in” would be one of the use case to use that system. If we can remember the statement quoted by author

“However, the human players were able to do so when they anticipated the actions of the enable operator and rang in just as the buzzer system was enabled.”

If this system was implemented, Watson would not give a chance for the human players to even attempt the question.

Questions

How large and what is the database for Watson, because the Jeopardy covered various categories ?

How does Watson know about the position of the players to look at the winner of the Final Jeopardy.

[Watson’s avatar was told to react appropriately -- looking happy by spinning many colorful threads or moving the threads to the side to “stare” at the winner.] -- Supporting statement

Why didn’t Watson use the internet for the information ?

Are these one of the game rules? If it is one of the game rule, it is almost equal to using a local data warehouse.

Why doesn’t Watson ring in on the the rebound, when it gave the wrong answer first ?

[Of course, if Watson had responded incorrectly earlier, it would not try again.]