Paper Reading Template

AI-For-NLP Course Group

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| Date | 2019-07-05 | |
| Title | COMPUTING MACHINERY AND INTELLIGENCE | |
| Author | A. M. Turing | |
| Question/Task | Description | You Answer |
| 1. Classify this paper | Is this paper pragmatic or theoretical?  Is this paper on science or engineering? | It’s a theoretical paper in engineering field |
| 2. Brief Summary | Using the as short as possible to summarize the paper content. | The paper provides an assumption of an imitation game to judge whether a machine can think, it also explains why the game works and the key point that should be concerned during the implementation of such a machine. |
| 3. Outline | Outlining the content as multiply parts.  For example, for one paper, you may outline the content as following:  1. Background  2. The other Researcher’s method  …  8. Future Planning  And explain how does these outlines work together to make this article completed. | 1. The Imitation Game-transform the question “can machine think” into a kind of imitation game 2. Critique of the New Problem-explains why this kind of game is good for answering the question 3. The Machines Concerned in the Game-this section describes the requirements of machine and restricts the discussion on digit computers 4. Digital Computers-explains the architecture, the principle of digital computers, and how to use this kind of machine to mimic human activity 5. Universality of Digital Computers-discusses the core feature of digital computer, which is discrete-state machines, and points out that provided it has enough storage, speed , and suitable program, this machine could be used in that imitation game 6. Contrary Views on the Main Question-lists several objections in several different areas and provides corresponding refutation 7. Learning Machines-discusses the connection of learning process of human and that of a machine, and several key points need to be concerned during the designing process of such a leaning program like rewards and pubishments. |
| 4. Mainly Issue | What is the issue that author want to solve? | 1. Prove that machine can think 2. How to create this kind of machine |
| 5. Find the difficult or important words. | Find what words you are not understood and explain it by yourself.  Find important words in this article. | discrete-state machines  instruction tables  mutation  teaching process  punishments and rewards  imperatives  propositions |
| 6. Find the difficult sentences confusing you and explain what they mean. | 找出文中你不太懂的句子，试着解释他，最好用另外一种解释方法解释。 不要玩文字游戏。  例如， 《纯理性批判》里有一句话“除了实际存在的事物，没有任何东西能发生作用“。 如果你解释成“如果某个东西不存在，那么它就不能发生作用“，这就属于玩文字游戏。比较合理的解释一个例子是”只靠可能会下的雨，青草是不会生长的“或“只靠可能有的存款，一个人的账号是不可能增加的“。 |  |
| 7. Find the main sentences author written. | Find out sentences which could express the intention of author mostly. | Let us fix our attention on one particular digital computer C. Is it true that by modifying this computer to have an adequate storage, suitably increasing its speed of action, and providing it with an appropriate program, C can be made to play satisfactorily the part of A in the imitation game, the part of B being taken by a man |
| 8. What have been solved and what not have been solved? | What problems or issues the author have solved?  What problems or issues the author haven’t solved? | Provide a way with explanations on judging whether a machine can think  no complete engineering method has been raised and tests have been done to fulfill this kind of task that could make machine think, just some ideas with part of which been approved |
| 9. Rethink of the paper | Can you explain the paper main content to others?  Can you explain the paper to your wife/husband?  Can you explain the paper to a kindergarten pupil?  This answer ***cannot be Yes/No simply.*** *Please write the explanation with integrity.* |  |
| 10. Which parts do you agree with the author?  Why do you agree with these? | Find out the opinions of author that you agree with.  Give the reason why do you agree with. |  |
| 11. Which parts do you not agree with the author? | List the parts or opinions that you do not agree with author. |  |
| 12. Why do you not agree with? | Classify each answer of question 11 as following types:  1. uninformed: 信息不足，必要的信息没有给到；  2. Misinformed: 论点与实事相反或不切合；  3. Logic Error; 逻辑错误，例如马基雅维的《君主论》里边：  所有的政府，不论新或旧，主要的维持基础在法律，如果这个政府没有很好的武装力量，就不会有良好的法律，也就是说，只要政府有很好的武装力量，就会有好的法律。  里边的逻辑错误在于“ 政府有很好的武装力量“ 应该是”有好的法律的“ 必要不重复条件，依照所述的逻辑，如果有好的法律，那么肯定有好的”武装“，但是有好的”武装“并不一定有好的法律。  4. Uncompleted Analysis; |  |
| 13. Is this article helpful to you?  How can you use these knowledges in your life or in future? | 简述这篇文章是否对你有用，对你以后哪些场景下回使用到？ |  |