**Answer 4**

**1 Brief Summary**

The recent success of neural networks in applications makes many people describe the automations of these tasks as having reached human level intelligence. Many researchers have a dilemma of “What just happened in AI?”. Therefore, the author wanted to trigger a discussion about recent developments in AI. Firstly, the author introduced model-based and function-based approaches. But function-based approach has a question that it highlights problems and thresholds more than it highlights technology. Then, two key questions are the following. Are the functions simple enough and do we have the ability to estimate these functions? There are three developments influencing these questions. The first is our improved ability to fit functions to data. The second is we have identified applications. The third is we changed the measures for success. The author thought the development of AI in some certain areas can not be called a breakthrough. But AI has impact on automation. He believed that attributing human level intelligence to the tasks currently conquered by neural networks is questionable. The current derivative for progress on neural has not been sustained long, so there are two questions. The first is about the whether the functions of cognitive tasks reach the thresholds and the second is about the functions are only approximations. Then, the author said that we face a bullied-by-success phenomena, so the government has the responsibility to guide junior researchers. In the end, he thought the need is cognitive function which captures a relationship that is typically associated with cognition. It has a catalogue of cognitive functions, a study of their representational complexity and a study of their learnability and approximateability. So, he said that he prefers to rename the field of deep learning to the field of *learning approximations of cognitive functions.*

**2 Agreement**

I agree with that while the current AI technology is still very limited, the impact it may have on automation and, hence, society may be substantial. The reason is that we could see many AI technologies such as some neural networks just apply to some certain commercial tasks and many of them are just emulate some processes which could reach some expected point of these tasks, like accuracy. In other words, we may do not know a precise underlying principle. However, we still use these technologies to solve some redundancy and duplication of work(automations), which has good results.

**3 Disagreement**

I disagree with that the combination of some behaviors of researchers and other members in community is harmful to scientific inquiry. The reason is that even we have many lessons of failure, such as the symbolic logic, we still can not predicate the future clearly since the wisest decision maker may make some mistakes. Therefore, from my perspective, industry which will trigger more discussion and research would bear more responsibilities in order to make the AI community have a huge progress since the practice will let us know more. It is a little bit difficult for the decision makers and senior members to control the current development and the current commercial success.