**Explaining Your Research**

*In two to three English sentences explain your research, in the space “****Your Research Topic Summary****”. Afterwards, use your summary as a guide to briefly talk (to your group) about your research in English. Then, in groups, listen to your classmates summaries, take notes about your classmates’ research and write down one to two questions about their research.*

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| **Name & Department or Lab Name** | **Summary of Research**  (1. What is the purpose of your research?  2. What actions will you take to perform this experiment? ) | **Your Questions** & **Their Answers** (about peer’s research topic) |
| Example:  Hong Gildong  Bio-mechanical Engineering Lab | The goal of his research is to determine if there is an optimal length of mammal eyelashes. He and his team will develop a model “eye” with lashes and place it in a wind tunnel to determine the optimal length to block particles and prevent dryness. | What materials would be used for the model?   * will use metal frame and poly fabric (as lashes)   Why isn’t a computer simulation being used?   * comp. simulation will be used 2nd but the model will determine important coefficients |
| **Your Name:**  \_kimheeseo\_\_\_\_\_\_  **Lab Name:**  \_\_\_\_\_CSDL\_\_\_\_ | **Your Research Topic Summary:**  My goal of research is Ldpc with deep learning(specifically, adjust tradeoff of complexity and performance improvement.)  The reason for improving complexity is to apply it to hardware.  recent research trend in communication field is to used deep learning. Therefore, I want to use this to improve performance. | Copy questions your **group members** **asked to you** about your research here:   1. How much has the complexity been reduced compared to previous studies? 2. What method of deep learning was used? 3. Is it available in hardware? |
| Group member name: seockchan song  Lab name:  pics | Topic : design quantum compute.(양자컴퓨터)  - cubic(큐빗) : ion trap(이온 포획 기반 양자 컴퓨팅). | Questions **you asked** about other peer/group members’ research here and below:  1. In which industries does it apply?   * 박사년차가 별로 안될정도로 현업에서는 아직 종사하시는 분은 없는데, 학회에서 잘 되신 분 ibmq에서 인턴을 하고 있고. 암호화 체계를 해결할 수 있을 것이라고 보인다. 고전 컴퓨터가 풀지 못했던 문제를 풀 수 있을 것이라고 생각한다.   예) 길찾기 문제.  It is a field that is currently being studied, so it is being applied in the field(not many).  In other words, it is a field focused on research. It is a way to solve a problem that is difficult to solve with a classical computer.   1. It is not familiar part? Introduce about it.   There is a limit to the calculation in classical computers, so the goal is to improve it in difficult conditions.(analog research part)   * Condition : low power, low noise and so on. |
| Group member name: kim ji won  Lab name:  epic | 하드웨어랑 알고리즘을 결합하는 기술  The goal of her research is “Technology that combines hardware and algorithms”. Specifically, a study on the using algorithm for communication environment about low power consumption, maintain communication algorithm). | Why is communication performance maintained?  - Minimize performance loss  In which industries does it apply?   * Irs algorithm, channel estimation algorithm. |
| Group member name:  Lab name: |  |  |