

# Feedback Report (Week 02)

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Name 이건

Title: Human-Data Interaction

Speaker: Professor Jaemin Jo

After attending this week's seminar, please write a brief summary of the content along with your comments. Your response should be approximately half a page in length.

이번 주 세미나를 듣고, 세미나의 내용을 간단히 요약한 뒤, 이에 대한 본인의 생각이나 의견을 작성하시기 바랍니다. 전체 분량은 약 0.5페이지 내외로 작성하여 제출하시기 바랍니다.

## 1. Summary

Briefly summarize the main content of this week's seminar.

이번 세미나의 주요 내용을 간단히 요약하세요.

Human-Data Interaction(HDI), a topic of Human-Computer Interaction(HCI), dives into the interactions between humans and data. HDI utilizes interactive visual interfaces for a better understanding, insights, and knowledge, and to decision making.

In the HDI, two main challenges need to be considered: scalability and dimensionality. As data have become larger and higher-dimensional due to technological advancements, it is becoming harder to maintain and study all the data and understand it. The professor's goal in his research is to find methods to counter these two challenges and make them manageable. His main research is designing an interactive visual interface that bridges the gap of scalability, latency, transparency, and explainability. The current draft is the responsive t-SNE, which is a progressive version of the original t-SNE[Maat08]. It functions as a t-SNE, but it requests and manages small

portions of data at a time. This may be more repetitive and more vulnerable, but it projects similar results to t-SNE in an exponentially shorter period of time.

## 2. Comments

Please include your comments, noting what you found interesting, what you would like to learn more about, and your personal thoughts on the seminar.

이번 세미나에서 흥미로웠던 부분, 더 알고 싶은 주제, 그리고 본인의 생각을 자유롭게 작성하세요.

The professor's current research topic is quite interesting. Recursively computing small data and progressively increasing the data size seems to be a smart approach to dealing with the current scalability and dimensionality of data. It is amazing how the professor was able to significantly increase the time taken to produce similar results to the t-SNE model. If I were to study this in detail, I would want to know the specifics on how it was possible to produce such results and the methodologies.