

Today's first session started with machine learning introduction. Machine learning requires data, and the fields of application include chat gpts that we often use or diffusion models that create images. In addition, there were a lot of different fields of application. In addition to the fields of natural language processing and computer vision, it could be used in various places such as medical care, recommendation systems, and games. The history of machine learning was also interesting. From checker game applications to the emergence of the concept of perceptron, ibm deep blue, and alpag0, I was able to hear stories. I was looking forward to imagining what machine learning content I would study and how it would be different from Korea.

In machine learning, I learned clustering during unsupervised learning. First of all, I learned kmeans clustering, but it was easy to understand because it was what I learned in Korea. kmeans++ was a little unfamiliar. Unlike kmeans clustering, which sets the initial centroid at random, it was impressive to improve the performance by dropping the initial centroid far away. The elbow method and DBSCAN were already known contents, so I was able to recall the contents once again. The silhouette score was interesting, and like the elbow method, I learned that it is one of the clustering performance evaluation indicators.

During exercise time, we solved the problem of classifying customers by clustering with actual bank datasets. I had difficulty writing the code, but I could see what ideas to use. Looking at the solution code, I felt that I needed to study more.