**My Reflective Journal**

Participating in Lab 03 gave me hands-on experience with Azure AI Language for text processing and analysis. I explored how AI extracts insights from text, a key aspect of NLP. Through practical exercises, I gained a deeper understanding of cloud-based AI services and their role in automating language processing tasks.

A key takeaway was analyzing hotel reviews using Azure AI Language’s built-in tools in the Azure AI Foundry portal. I worked with various text analytics functionalities, including:

* Named Entity Recognition (NER): extracting key entities like names, locations, and dates.
* Key Phrase Extraction: identifying important information in a text.
* Text Summarization: generating concise summaries from large datasets.
* Tag Extraction and Attribute Detection: recognizing objects, actions, and attributes in text.

I observed how AI models assign confidence scores to predictions in NLP tasks, such as text classification and named entity recognition. From other resources, I learned to refine model performance by adjusting threshold values for better accuracy in sentiment analysis and entity detection.

Initially, understanding the interface and tools required trial and error, but repeated practice improved my familiarity. Some results, like extracted key phrases and confidence scores, needed deeper interpretation. Experimenting different inputs helped me grasp how the AI model processes and prioritizes text data. While entity extraction and summarization were straightforward, understanding how AI assigns contextual meaning required further exploration.

This lab showed me the shift from traditional AI models to scalable, cloud-based solutions. Previously, I worked with neural networks in TensorFlow and PyTorch, focusing on model development. Azure AI Language introduced me to pre-built AI services that help businesses automate text processing efficiently.

I also gained insights into real-world applications of AI-powered text analysis. I now better understand how industries like customer service, retail, and content moderation use AI to extract insights from unstructured text data.

Overall, this lab strengthened my technical and analytical skills. The challenges I faced encouraged a structured approach to AI-driven text processing. My exposure to Azure AI Language has inspired me to explore cloud-based AI solutions further. I am particularly interested in applying key phrase extraction and sentiment analysis in real-world scenarios to gain deeper insights from textual data. This experience has reinforced my motivation to continue learning and experimenting with AI-driven language technologies.