ABCI 3.0開発加速利用（2024年度）成果概要（公開用）

課題名：Representation Learning and Natural Language Processing	実施時期：2024 FY 所属機関名：The University of Tokyo 代表者氏名：Edison Marrese Taylor (Yoshihiro Noumi)

成果概要：This project conducts research on Natural Language Processing, using neural nets and pre-trained models (including large language models or LLMs) to:
- Study and measure the abilities of pre-trained language models to understand semantics in different contexts, by means of zero-shot evaluation on definition modelling tasks.
- Develop new techniques in vision-and-language to improve the temporal understanding of natural language in multi-modal models.

成果のポイント：The project helped the execution of empirical experiments using Large Language Models for diverse tasks related to Natural Language Processing, concretely helping with the development of the following papers:

- **Short and long-range comedy generation and understanding using Large Language Models**. Edison Marrese-Taylor, Machel Reid, Alfredo Solano. 言語処理学会 第31回年次大会 (ANLP 2025)
- **Data Augmentation for Open-Domain Live Commentary Generation**, Erica K. Shimomoto, Edison Marrese-Taylor, Ichiro Kobayashi, Hiroya Takamura, Yusuke Miyao. 言語処理学会 第31回年次大会 (ANLP 2025)
- **Language Models can Categorize System Inputs for Performance Analysis**. Dominic Sobhani, Ruiqi Zhong, Edison Marrese-Taylor, Keisuke Sakaguchi, Yutaka Matsuo. 2025 Annual Conference of the Nations of the Americas Chapter of the Association for Computational Linguistics (NAACL 2025).
- **Multilingual Definition Modelling.** Edison Marrese-Taylor, Erica K. Shimomoto, Alfredo Solano, Enrique Reid. 2025 Annual Conference of the Association for Computational Linguistics (ACL 2025) (submitted)

成果についてより詳細な情報を提供している Webページ、発表論文などの情報： Please see this link for papers on ANLP 2025, this link for NAACL 2025 and this link for ACL 2025.