Heterogeneous Data and Large Representation Models in Science

Contribution ID: **15**   Type: **Oral presentation**

Salt: Multimodal, Multitask Models for the ATLAS Experiment

Wednesday 2 October 2024 14:00 (35 minutes)

In High Energy Physics, experimental data can range from low level hardware information from different sub-detectors to high level reconstructed physics events. To address the need for flexible, multimodal machine learning models within the ATLAS experiment, the Salt framework based upon PyTorch and Lightning has been developed. Salt was initially developed for the identification of heavy-flavour jets but has expanded to a wider range of tasks including searches for long lived particles, jet mass regression or vertex fitting.

Contribution length

Middle

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