AISSAI - Heterogeneous Data and Large Representation Models in Science



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Explaining Jet Flavour Taggers with Integrated Gradients

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At the Large Hadron Collider (LHC), proton-proton collisions produce collimated streams of particles called jets created from particle decay chains. Identifying the particle that originated the jet (flavour tagging) is crucial. Modern taggers use deep learning models with features of the decay products as inputs. We show that integrated gradients reveal how these complex and opaque models use the characteristic features of the decay products to classify the particle that originated the jet.

Contribution length

Short

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