

# An Open Source MLOps Pipeline for Particle Accelerators

*Wednesday, March 6, 2024 12:10 PM (20 minutes)*

In this talk we will describe the open-source MLOps (Machine Learning Operations) framework tools selected and designed to support ML (Machine Learning) algorithm development and deployment on Fermilab's main accelerator complex. MLOps is the standardization and streamlining of the ML development lifecycle to address the challenges and risks associated with large-scale machine learning projects such as: changing data dependencies, varying operations needs, reproducibility, and diverse teams working with differing tools and skills. We will show how this framework is being used for minimizing the injection and extraction losses of our Booster synchrotron.

## Primary Keyword

MLOps

## Secondary Keyword

## Tertiary Keyword

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**Session Classification:** Infrastructure / Deployment Workflows

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