WAO'18: Workshop on Accelerator Operations



Contribution ID: 27 Type: Oral

Developing Machine Learning Algorithms for NSLS-II Linac with Operators

Friday 5 October 2018 08:30 (20 minutes)

Machine Learning has proven itself as a useful technique in a variety of applications. We have used machine learning techniques to provide an RF feedforward system to the NSLS-II linac to correct for long term drifts in the system. Prior to this, the operator needed to do the correction manually. The operators participated in every aspect of the process from generating the necessary controls, to data collection, and verification. In this paper, we discuss have machine learning was used to correct drifts in the NSLS-II linac and how the operators participated in its development.

Author: FLILLER, Raymond (Brookhaven National Laboratory)

Co-authors: RAINER, Robert (Brookhaven National Laboratory); Mr GARDNER, Charles (Brookhaven National Laboratory); Mr MARINO, Philip (Brookhaven National Laboratory); Mr SANTANA, Michael (Brookhaven National Laboratory); Mr WEINER, Gary (Brookhaven National Laboratory); Mr ZEITLER, Edward (Brookhaven National Laboratory)

Presenter: FLILLER, Raymond (Brookhaven National Laboratory)

Session Classification: New Technology

Track Classification: Impact of New Technology for Control Room Operations