Contribution ID: **241** Type: **Invited Talk**

Real-time machine learning in embedded systems for particle physics

Monday, 12 October 2020 13:45 (35 minutes)

We discuss applications and opportunities for the machine learning in real-time embedded systems in particle physics. This talk will focus on how to implement machine learning algorithms in systems with FPGAs and ASICs for a variety of use-cases. We will review essential ideas for designing and optimizing efficient algorithms in hardware and emerging tool flows to accelerate algorithm development. We will then explore a few examples spanning different application spaces such as front-end data compression in rad-hard environments to powerful trigger reconstruction algorithms to controls of particle accelerators.

Minioral

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Are you a student?

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