PUNCHLunch –

the online lunch seminar of the PUNCH4NFDI Consortium

Every second Thursday, 12:30-13:30 hrs: keynote and discussion



Thursday, 11 March 2021, 12:30 hrs:

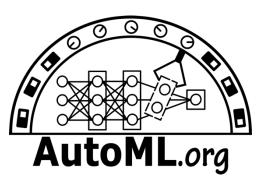
M. Lindauer (U Hannover)

"AutoML 101"

Simplifying machine learning for fundamental science with Automated ML

Abstract:

In recent years, artificial intelligence (AI) enabled impressive results in various applications, for example in computer vision, natural language processing, game playing and many more. However, effectively applying AI and in particular machine learning (ML) can be challenging and even experienced developers are faced with several difficult design decisions, such as which



algorithms to apply and how to set their corresponding hyperparameters. Unfortunately, the performance and thus the success of these systems strongly depend on such subtle but important design decisions. Therefore, automated machine learning (AutoML) supports developers and users by automatically optimizing ML pipelines for the needs of their application at hand. In this PUNCHLunch, I will provide a broad overview over recent AutoML ideas – including efficient optimisation, metalearning, and ensembling – and of our tools. This will be complemented by a discussion of pros and cons of AutoML and of future research directions.

Connection details:

ZOOM Webinar "PUNCH-Lunch": https://desy.zoom.us/j/94927131622

Webinar ID: 949 2713 1622, passcode: 532479

Next event:

Thursday, 25 March 2021, 12:30 hrs Data irreversibility in the PUNCH world (M. Krämer, A. Redelbach)

Connect to PUNCH4NFDI:

Twitter: @PUNCH4NFDI Mail: punch4nfdi@desy.de Web: www.punch4nfdi.de