IML Machine Learning Working Group: open topic

Report of Contributions

https://indico.cern.ch/e/679765

Contribution ID: **1** Type: **not specified**

News and group updates

Friday 26 January 2018 15:00 (10 minutes)

Presenters: MONETA, Lorenzo (CERN); STOYE, Markus (CERN); FLORIS, Michele (CERN); SEYFERT, Paul (CERN); SCHRAMM, Steven Randolph (Universite de Geneve (CH))

Session Classification: Regular IML meeting

Contribution ID: **2** Type: **not specified**

ROC's, AUC's and alternatives in HEP and other domains

Friday 26 January 2018 15:10 (30 minutes)

Presenter: VALASSI, Andrea (CERN)

Session Classification: Regular IML meeting

Contribution ID: **3** Type: **not specified**

Riemann-Theta Boltzmann Machine

Friday 26 January 2018 15:40 (20 minutes)

https://arxiv.org/abs/1712.07581

Presenters: KREFL, Daniel (CERN); KREFL, Daniel (Unknown); CARRAZZA, Stefano (CERN)

Session Classification: Regular IML meeting

Contribution ID: **4** Type: **not specified**

Conference report: NIPS

Friday 26 January 2018 16:00 (20 minutes)

Presenter: THAIS, Savannah Jennifer (Yale University (US))

Session Classification: Regular IML meeting

Contribution ID: **6** Type: **not specified**

EP-IT data science seminar: Soumith Chintala (Facebook): Automatic Differentiation and Deep Learning PLEASE JOIN THIS SESSION THROUGH WEBCAST FROM THE SEMINAR PAGE

Friday 26 January 2018 14:00 (1 hour)

https://indico.cern.ch/event/689421/

Statistical learning has been getting more and more interest from the particle-physics community in recent times, with neural networks and gradient-based optimization being a focus.

In this talk we shall discuss three things:

- automatic differention tools: tools to quickly build DAGs of computation that are fully differentiable. We shall focus on one such tool "PyTorch".
- Easy deployment of trained neural networks into large systems with many constraints: for example, deploying a model at the reconstruction phase where the neural network has to be integrated into CERN's bulk data-processing C++-only environment
- Some recent models in deep learning for segmentation and generation that might be useful for particle physics problems.

Please note that a Webcast retransmission will be available for this Seminar.

Session Classification: Seminar

Contribution ID: **7** Type: **not specified**

Spes Spirae

Friday 26 January 2018 16:20 (20 minutes)

Presenter: JOERGENSEN, Lars Varming (CERN)

Session Classification: Regular IML meeting

Contribution ID: **8** Type: **not specified**

Minutes

Friday 26 January 2018 16:40 (1 minute)

Session Classification: Regular IML meeting