UF UNIVERSITY of FLORIDA

IML

Machine Learning CWP

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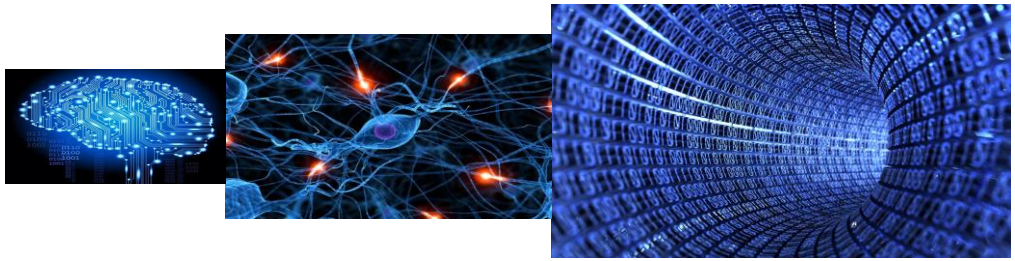

IML Workshop

March 20, 2017

CWP

- HSF CWP Webpage
- HSF CWP-ML Google group
- HSF CWP-ML Google doc

CWP-ML Timeline

- Time-scale:
  - three months
- Part I:
  - HSF San Diego Workshop
- Part II:
  - Today
- Part III:
  - DS@HEP
- CWP Workshop in June

WG Charge

Scope: Machine Learning algorithms play an important role in many facets of today's HEP data analysis, data-processing and detector applications. Machine-learning tools already form an important part of HEP software. To overcome the challenges related to data-processing and analysis of upcoming very large HEP data-sets, it is important to plan ahead for how HEP machine-learning software and tools develop. **This group will work on both identifying the challenges related to machine-learning software in HEP and proposing possible solutions and a community roadmap towards better HEP-ML software.**

Today

- Look over questions
- Discuss the roadmap towards possible answers
- Edit individual sections

Groups

1. External and Internal ML Tools
2. New applications of ML and R&D
3. Bridges to other communities
4. Resources and related: Interactive, HPC, Cloud, GPUs, Storage
5. Training the community in ML

CWP-ML

Let's begin!

CWP-ML Sections

1. Introduction

- Motivation
- Machine Learning and HEP

CWP-ML Sections

2. ML Software and Tools

- Status
- Software Methodology
- Programming Languages
- I/O
- Parallelization
- Interactivity
- Interfaces to acceleration hardware
- Sustainability

CWP-ML Sections

3. Computing Resources for ML

- Data Storage
- Training
- Application
- Data Availability