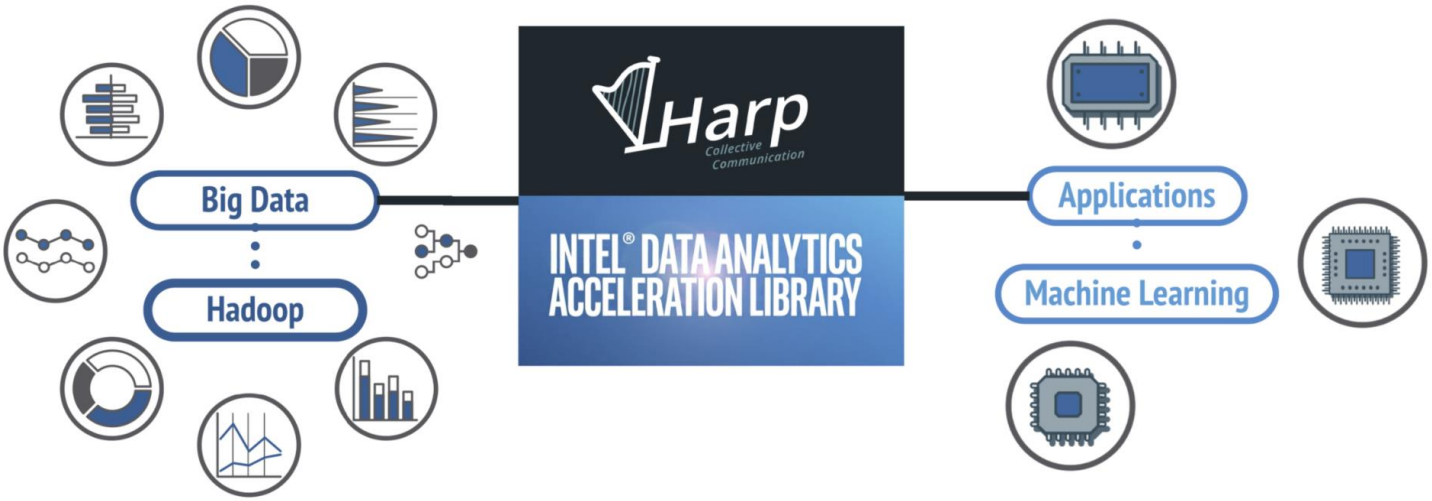
Tutorial: Harp-DAAL for High Performance Big Data Machine Learning

9:45 am – 12:00 pm on November 12, 2017, HPCDC Conference, Denver, Colorado

Objective

In this tutorial, you will learn about scalable Machine Learning on HPC-Cloud. Harp (Hadoop plugin) provides communication patterns and invokes Intel® Data Analytics Acceleration Library (DAAL) with the fastest machine learning algorithms on Xeon™ or Xeon Phi™ architectures.



For Developers

We introduce Harp-DAAL, a high-performance machine learning framework.

For Users

Simple Python interface and run scalable machine learning applications on Google Cloud.

AI & You

This tutorial clarifies what type of hardware and software is needed for scalable machine learning.

Hands-on examples

	Examples	Learning Tasks
Applications	Image Clustering with Kmeans	Classification
	Text Categorization with Naïve Bayes	Classification
	Recommender System with MF-SGD	Recommender System
	Naive Bayes	Classification
	Neural Network	
	Linear Regression	Regression
Algorithms	Ridge Regression	
	K-means	Clustering
	Matrix Factorization(SGD)	Recommender System
	Matrix Factorization(ALS)	
	SVD, PCA, QR	Dimension Deduction
	Moments, Covariance	Statistics

Tutorial website: https://dexterrules.github.io/SC-Demo-17/SC-Demo.html