

Abstract: Networking has become a well-known performance bottleneck for distributed machine learning (DML). Although lots of works have focused on accelerating the communication ...

In this paper, we present a review of optical switching techniques capable of meeting the requirements of the next generation of large-scale data center networks.

Enabled by programmable data plane (PDP), in-network computing (INC) can offload the computation phase of distributed machine learning (DML) training to accelera

This paper optimizes the training of distributed machine learning (DML) in an optical circuit switching (OCS) based data-center network (DCN), where the optically-interconnected racks are purely used...

We formulate a mixed integer linear programming (MILP) model to optimize the job scheduling for the cases with and without INC, and propose a heuristic to tackle the case with INC quickly. Extensive ...

Usually this is achieved by means of a centralized scheduler that given a demand traffic matrix computes the flow assignment and the optical-switch configuration. This seemingly simply design, ...

In this paper, we firstly introduce the problem of DML scheduling in circuit-switched networks, and then propose intra-job scheduling algorithm HLF and inter-job scheduling algorithm ...

IV. DML WORKLOAD SCHEDULING IN P4INC-AOI In this section, we first explain the network model of P4INC-AOI and formulate an MILP to describe the optimiza-tion for scheduling DML jobs with INC in it.

Review of optical switching, trends and needs for high-speed switching in optical networks. The latest developments in all-optical switches are discussed.

The aim of this paper is to build a fiber-optic network that includes the optical switch, which is the most crucial component due to its critical role in fulfilling the demands of the fiber-optic ...

Therefore, in this paper, we study the online multi-job scheduling for DML in OCS networks.

The latest developments of techniques applied in optical access, local, metropolitan, and wide area networks are covered, including detailed technical descriptions of generalized multiprotocol label ...



# Proxy Optical Network Switch DML

Web: <https://maxtools.co.za>

