ABSTRACT

MXNet is a fully featured, flexibly programmable, and ultra-scalable deep learning framework supporting state of the art deep learning models. It provides both low-level-control and high-level APIs that allow developers to mix imperative and symbolic programming models and to code in their language of choice (including Python, Scala, Java, C++ and R). Besides its computational and memory efficiency, MXNet is lightweight and portable and can run on various systems including edge devices. It supports distributed training on multi-GPUs across multiple hosts and achieves high scalability. MXNet has its roots in academia and came about through the collaboration and contributions of researchers at several top universities. It originated at Carnegie Mellon University and the University of Washington and is now developed by collaborators from multiple universities and many companies including AWS. This seminar will give an overview about how MXNet started and an overview of its core capabilities. In addition, the seminar will demonstrate advanced features such as distributed training and deployment on edge devices.