

Linux Foundation: CNCF and LF Deep Learning Foundation Projects

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- [Kontainer Korner: CNCF Welcomes CRI-O, Graduates Fluentd](#) [2]

The revolving door of hosted projects within the Cloud Native Computing Foundation continued to turn this week as the organization welcomed in a new incubated project and saw one of its prized pupils walk the graduation stage.

Coming into CNCF is the CRI-O container runtime, which is an implementation of the Kubernetes container runtime interface (CRI) that provides an integration path between Open Containers Initiative (OCI) conformant runtimes and Kubernetes kubelets. It was initially developed by Red Hat and Google under the guise of the OCI Daemon and adopted in CNCF in late 2016.

A container runtime basically provides an API and tools that abstract low-level technical details in the container. CRI-O was developed as a 'slimmer' version of regularly available container runtime options.

- [Horovod: an open-source distributed training framework by Uber for TensorFlow, Keras, PyTorch, and MXNet](#) [3]

The LF Deep Learning Foundation, a community umbrella project of The Linux Foundation, announced Horovod, started by Uber in 2017, as their new project, last year in December. Uber joined Linux Foundation in November 2018 to support LF Deep Learning Foundation open source projects.

Horovod (named after a traditional Russian dance) announced at 2018 KubeCon + CloudNativeCon North America, is an open source distributed training framework for

TensorFlow, Keras, MXNet, and PyTorch. It helps improve speed, as well as scales and resource allocation in machine learning training activities. The main goal of Horovod is to simplify distributed Deep Learning and make it fast.

OSS

Source URL: <http://www.tuxmachines.org/node/122842>

Links:

[1] <http://www.tuxmachines.org/taxonomy/term/72>

[2] <https://www.sdxcentral.com/articles/news/kontainer-korner-cncf-welcomes-cri-o-graduates-fluentd/2019/04/>

[3] <https://hub.packtpub.com/horovod-an-open-source-distributed-training-framework-by-uber-for-tensorflow-keras-pytorch-and-mxnet/>