Tutorial Title: Introduction to Vitis AI development Tools Flow

Description:

In this tutorial we will describe Xilinx machine learning solutions with the Vitis AI development tools. We will list and explain the supported frameworks, network modes, and pre-trained models for cloud and edge applications. The Vitis AI development environment features, the tool flow, the software stack, and supported deployment platforms will be explained. Various DPU configurations to optimize a model for an edge application will be covered. High-level libraries and the APIs of the Xilinx AI Library will be identified.

You will go through the tool flow using Caffe, TensorFlow, and PyTorch frameworks. The labs will demonstrate the important steps involved in developing applications using these frameworks. The labs will be done using AWS instances, but the gained knowledge applies to other Vitis AI platforms based on Alveo, Versal and MPSoC boards. You will also do a lab that guides you through the steps involved in creating a complete edge targeting application.

Date: May 15, 2022
Duration: 12:00 PM – 4:00 PM Eastern Daylight Time
Presenter: Naveen Purushotham, Application Engineer
A Short-Bio: Naveen received MS in Electrical and Computer Engineering from the University of New Mexico, in 2010 before joining as a Product Engineer at Lattice Semiconductor Corp. Currently he is working for Xilinx as a Staff Applications Engineer. He part of the Xilinx University Program team which is technical group inside Xilinx CTO office. He is actively engaged in Xilinx open source project called PYNQ. He enjoys working in Machine Intelligence area.

Duration and mode of delivery: Lectures and labs will be interleaved. Lectures will be delivered using Zoom and labs will be conducted using AWS F1 instances provided by Xilinx.