Avviso di Seminario

Organizzato nell'ambito del corso "Edge AI for Solving Real-World Problems: Theory and Applications", Corso di Dottorato in Ingegneria dell'Informazione, ed aperto a tutte le interessate e a tutti gli interessati

Mercoledì 10 Luglio 2024, ore 14:30 - 17:30, aula 155/D4

THE UNIFIED AI CORE TECHNOLOGY ACROSS SENSORS AND MICRO-CONTROLLERS

Ing. Danilo Pau
System Research and Applications, STMicroelectronics, Agrate Brianza

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Abstract Understand and accompany productively both Tiny Machine Learning and Embedded engineers in their AI journey toward innovation is becoming of paramount priority for a large enterprise which ambition is to be a leader of AI hardware and software solutions at the edge. There is an increasing demand of new tools to support these communities in being faster, more productive to unleash their creativity more than ever, especially in small and medium enterprise where investments can not be wasted. To help that, ST, devoted its best resources across product divisions and system research to create the Unified AI Core Technology interface. It acts as the enabling unifying AI technology to serve all heterogeneous products such as micro-controllers and sensors. Furthermore, this technology interfaces the most widely used Deep Learning representation standards such as Google Keras, QKeras and Tensorflow Lite and the Open Neural Network Exchange (ONNX). It outputs optimized C code across heterogeneous instruction sets with public APIs for STM32, STM32N6, Stellar MCUs and AI MEMs sensors. Demonstration of the tool in action will be provided to the audience.

Bio Danilo Pau is Technical Director, IEEE AAIA & ST Fellow, APSIPA Life Member in STMicroelectronics. Danilo (h-index 28, i10-index 75) graduated at Politecnico di Milano on 1992. He worked on memory reduced HDMAC HW design, MPEG2 video memory reduction. on video coding, transcoding, embedded (Khronos) 2/3D graphics, as co-chair ISO/IEC/MPEG CDVS and CDVA standards, and computer vision. Currently, his work focuses on the ST Unified AI Core Technology. He supervised many students.

Link Teams per la partecipazione da remoto: https://bit.ly/3KZXPcM

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