



Dipartimento di INGEGNERIA PER LA MEDICINA DI INNOVAZIONE

Speaker: Danilo Pietro Pau

https://www.linkedin.com/in/danilopietropau/

Technical director, IEEE, AAIA and ST Fellow, APSIPA Life Member

Agrate Brianza, Lombardy, Italy

Title: AI tools for in sensor computing and AI for MCU

Abstract

Abstract Embedded Machine Learning developers urge tools to assist them in developing solutions with the highest productivity. When targeting applications for automotive, IoT, medical, industrial etc. the fragmentation of the tools to be used is severely limiting their creativity and capability to achieve fast time to market. ST.AI technology has been created to address this challenge and to act as unified tool to serve ST products such as the STM32 micro-controller family including the newborn STM32N6, the Stellar micro-controller family and the ISPU and MLC sensor family. ST.AI interfaces the most widely used Deep Learning representation standard such as Google Keras, QKeras and Tensorflow Lite and the Open Neural Network Exchange (ONNX). ST.AI products optimized C code and public APIs for all ST micro controllers and sensors leaving developers free to use the IDE they prefer thus fastly finalizing the application of choice.

Short bio

Danilo PAU (h-index 26, i10-index 69) graduated in 1992 at Politecnico di Milano, Italy. One year before his graduation, he joined SGS-THOMSONS (now STMicroelectronics) as interns on Advanced Multimedia Architectures, and he worked on memory reduced HDMAC HW design. Then MPEG2 video memory reduction. Next, on video coding, transcoding, embedded 2/3D graphics, and computer vision. Currently, his work focuses on developing solutions for tiny machine learning tools.

Since 2019 Danilo is an IEEE Fellow and AAIA on 2023; he served as Industry Ambassador coordinator for IEEE Region 8 South Europe, was vice-chairman of the "Intelligent Cyber-Physical Systems" Task Force within IEEE CIS, was IEEE R8 AfI member in charge of internship initiative. Today he is a Member of the Machine Learning, Deep Learning and AI in the CE (MDA) Technical Stream Committee CESoc. He was AE of IEEE TNNLS. He wrote the IEEE Milestone on Multiple Silicon Technologies on a chip, 1985 which was ratified by IEEE BoD in 2021 and IEEE Milestone on MPEG Multimedia Integrated Circuits, 1984-1993 which was ratified in 2022. He served as TPC member to TinyML EMEA forum and is the chair of the TinyML on Device Learning working group. He serves as 2023 IEEE Computer Society Fellow Evaluating Committee Members.

With 78 and 68 respectively European and US application patents, 157 publications, 113 ISO/IEC/MPEG authored documents and 67 invited talks/seminars at various Universities and Conferences, Danilo's favorite activity remains supervising undergraduate students, MSc engineers and PhDs.

Zoom link

Gloria Menegaz is inviting you to a scheduled Zoom meeting.

Topic: Seminario DIMI - Ing. Danilo Pau Time: Dec 5, 2023 12:00 PM Rome

Join Zoom Meeting https://univr.zoom.us/j/98699597909

Meeting ID: 986 9959 7909