



Seminar Announcement

Organized within the course "Edge AI for Solving Real-World Problems: Theory and Applications", PhD Course in Information Engineering, and open to all interested parties

16 June 2025, 14:30 - 17:30, Engineering Building, Room 140/3

FIXED TO GENERATIVE EDGE AI: PRACTICAL USE OF ST EDGEAI CORE TECHNOLOGY ON ST SENSORS AND MCU

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Abstract

Artificial intelligence (AI) has evolved from Fixed AI to Edge AI, which processes data on devices like sensors and microcontrollers. A key challenge in Edge AI is managing the diverse hardware and software environments. STMicroelectronics addresses this with its Unified AI Core Technology, ensuring compatibility with products like STM32 and Stellar microcontrollers. Generative AI risks widening the digital divide due to its complexity and cost, making advanced technology less accessible to smaller enterprises. Edge AI helps bridge this gap by offering scalable, cost-effective solutions that empower small and medium enterprises to leverage AI without extensive infrastructure. Understanding these concepts is crucial for students and enterprises aiming to lead in AI-driven markets, fostering innovation and productivity. STMicroelectronics demonstrates its Unified AI Core Technology on platforms like STM32 and AI MEMs sensors, showcasing its benefits. As industry transitions towards Generative and Agentic AI, rethinking Edge AI is essential. Examples from STM32MP2 and STM32N6 highlight future directions.

Bio

Danilo Pau is Technical Director, IEEE AAIA & ST Fellow, in STMicroelectronics. Danilo (h-index 30, i10-index 86) 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 cochair 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.



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