ΕΘΝΙΚΟ ΜΕΤΣΟΒΙΟ ΠΟΛΥΤΕΧΝΕΙΟ
ΣΧΟΛΗ ΗΛΕΚΤΡΟΛΟΓΩΝ ΜΗΧΑΝΙΚΩΝ ΚΑΙ ΜΗΧΑΝΙΚΩΝ ΥΠΟΛΟΓΙΣΤΩΝ

Το Εργαστήριο Μικροϋπολογιστών και Ψηφιακών Συστημάτων Της Σχολής Ηλεκτρολόγων Μηχανικών και Μηχανικών Υπολογιστών του ΕΜΠ
σας προσκαλεί στη διάλεξη[*] της

Prof. Cristina Silvano

Politecnico di Milano
Chair of the Research Area on Computer Science and Engineering at DEIB
IEEE Fellow

με θέμα:

"Energy-efficient Accelerators for Deep Learning on the Edge"

Η διάλεξη θα γίνει την Παρασκευή, **11 Ιουλίου 2025, ώρα 11:00**
στο **Αμφιθέατρο 2 (Νέα Κτ. Σχολής ΗΜΜΥ ΕΜΠ)**

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Abstract:

Hardware accelerators play a crucial role to accelerate Deep Learning on High Performance Computing systems and data centers providing the computational power needed to process vast amounts of data and train complex models. With the growing demand to run Deep Learning models directly on edge devices -- such as embedded systems, mobile phones, and IoT smart devices, energy-efficient hardware solutions have become increasingly important. This talk explores hardware accelerators across the spectrum, from HPC systems to edge devices, highlighting their role to speed up Deep Learning wokloads by reducing execution times and improving energy efficiency.

Short CV:

Cristina Silvano is a Full Professor of Computer Science and Engineering at Politecnico di Milano, where she is the Chair of the Research Area on Computer Science and Engineering. In 2022, she was promoter of the master degree in HPC Engineering at Politecnico di Milano, where she teaches the course on Advanced Computer Architectures. Currently, she is the leader of the flagship project on Hardware Accelerators of the Italian National Research Center for High Performance Computing. She has been Scientific Coordinator of three European research projects (ANTAREX, 2PARMA and MULTICUBE). Her research activities are in the areas of computer architecture and electronic design automation, with focus on design space exploration of energy-efficient accelerators for deep neural networks and application autotuning for high-performance computing. She has published more than 200 peer-reviewed papers, six books, and some patents. Since 2017, she is an IEEE Fellow for her contributions to energy-efficient computer architectures.