

ARTIFICIAL INTELLIGENCE

MUR DM 117/Focoos AI - Toward efficient neural models for Computer Vision Tasks

Funded By	MINISTERO DELL'UNIVERSITA' E DELLA RICERCA [P.iva/CF:97429780584] FOCOOS AI S.R.L. [P.iva/CF:12783970010] Politecnico di TORINO [P.iva/CF:00518460019]
Supervisor	AVERTA GIUSEPPE BRUNO - giuseppe.averta@polito.it
Contact	AVERTA GIUSEPPE BRUNO - giuseppe.averta@polito.it CAPUTO BARBARA - barbara.caputo@polito.it
Context of the research activity	Development of neural models able to perform complex computer vision tasks on edge devices. Progetto finanziato nell'ambito del PNRR – DM 117/2023 - CUP E14D23002040004
Objectives	This research aims to foster the development of neural models able to perform complex computer vision tasks on edge devices, focusing on developing deep learning models and techniques optimized to be efficient under energetic and computational requirements. Particular attention will be given to complex computer vision and multi-modal tasks, such as semantic, instance, and panoptic segmentation, and to using large foundation models as a source of knowledge.
Skills and competencies for the development of the activity	Extensive knowledge of Python. Knowledge of Pytorch framework. English fluency. Experience in preparing and revising research plans, understanding and disseminating research works, and writing scientific papers. Experience with semantic segmentation tasks.