Università di Genova

DIBRIS DIPARTIMENTO
DI INFORMATICA, BIOINGEGNERIA,
ROBOTICA E INGEGNERIA DEI SISTEMI

Muhammad Mohsin
Selective Disassembly of Electronic Components from WEEE using Artificial Intelligence

9nd November 14:30, DIBRIS VP Room 214

Artificial Intelligence has become a relevant component of the Circular Economy over the last few years, especially in supporting fast and efficient sorting of materials with computer vision and object recognition. The recycling of waste from electrical and electronic equipment (WEEE) allows the recovery of many raw materials to be used in new production processes. Today only 20% of WEEE is being recycled while all others are lost with highly negative consequences for humans and the environment. Therefore, developing an AI model for efficient, safe, and fast disassembly and recycling are crucial. This presentation will focus on a brief introduction to WEEE recycling challenges, its background, critical raw materials and proposed workflow for the disassembly of electronic components from WEEE.

BIO

Muhammad Mohsin is a first year PhD student in Computer Science. He obtained his Master's in Computer Engineering from National University of Sciences and Technology (NUST), Islamabad, Pakistan in 2021. His research interests include machine learning, deep learning, and medical imaging analysis. Currently, he is working on selective disassembly of electronic components from e-waste using deep learning. He is working under the supervision of Francesco Masulli and Stefano Rovetta.