University of Messina
MIFT Department
Bachelor Data Analysis

UNIME Internship Project Proposal

ID	PTI_Maria Fazio_10/01/2024 16.10.19
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Project Supervisor

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Internship Project Details

Title	Knowledge Distillation framework analysis

Detailed Description: In recent years, Machine Learning (ML) and Artificial Intelligence (AI) techniques have transitioned towards edge computing, targeting devices with limited capacity and low performance. These devices generally pose constraints on running complex models. Therefore, there is a need for model simplification using existing techniques. Knowledge distillation involves training a simpler model, known as the student model, to emulate the behavior of the original, more complex teacher model, ensuring efficiency and faster execution. FedDF and FedCD are two knowledge distillation frameworks used jointly with Federated Learning, assuring high accuracy for the student model. Both frameworks are available on GitHub, and the objective is to compare them.

Duration (months – max 12)	4
Duration (hours)	60
Potential deadline	
Number of open position	2

Internship Skills

Required skills: Knowledge of computer networks and basic knowledge on Machine Learning.

Other skills	