INTERUNIVERSITY RESEARCH GROUP OPTIMIZATION ALGORITHMS AND SOFTWARE FOR INVERSE PROBLEMS

OASIS Optimization Algorithms and Software for Inverse problemS

OASIS SPRING DAY

12 June 2023 Aule didattiche Ercolani Università di Bologna



PROGRAM

10:00 - Opening

10:30 - <u>Ambra Catozzi</u>: Piece-wise constant image segmentation with a deep image prior approach

10:50 - <u>Giorgia Franchini</u>: Automatic setting of learning rate and mini-batch size in momentum and Adam stochastic gradient methods

11:10 - <u>Filippo Camellini</u>: p-th root of stochastic matrices: a deep unsupervised learning approach

11:30 - coffee break

11:50 - <u>Simone Rebegoldi</u>: PHILA: proximal heavy-ball inexact linesearch algorithm

12:10 - <u>Alessandro Benfenati</u>: A deep learning generative model approach for image synthesis of plant leaves

12:30 - lunch break

14:30 - <u>Elena Govi</u>: Addressing challenges in industrial pick and place: a deep learning-based 6D pose estimation solution

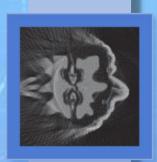
14:50 - <u>Francesco Mezzadri</u>: A framework for shapeparametrized neural networks

15:10 - <u>Davide Evangelista</u>: On invariances in deterministic diffusion implicit models and (potential) applications to image reconstruction

15:30 - <u>Serena Crisci</u>: Variable metric gradient methods with diagonal Barzilai-Borwein stepsizes

15:50 - Closing remarks





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