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Italiadomani
PIANO NAZIONALE
DI RIPRESA E RESILIENZA

FAIR Spoke Workshop 2025

March 24-25, 2025

Rende (CS)

Aula Magna,
Centro Congressi B. Andreatta
Università della Calabria

SCHEDULE



Green-aware AI



Future
Artificial
Intelligence
Research

2nd Year Workshop

March 24, 2025

SCHEDULE

9:00 – 9:30 **Registration**

9:30 – 9:45 **Spoke 9 “Green-aware AI” Progress Report** (F. Scarcello and A. Guzzo)

9:45 – 11:00 **Focus on KRR Frameworks for Green-aware AI** (Chair G.B. Ianni)

- **AI-Driven Environmental and Territorial Monitoring: The SKET-Monitor Project** (Luca Pulina)
- **Optimizing ASP evaluation for a sustainable declarative AI** (Giuseppe Mazzotta)
- **Patient Management via ASP and LLMs** (Stefania Costantini)
- **Study of relevant interactions for sustainable development support** (Simona E. Rombo)

11:00 – 11:30 **Coffee Break**

11:30 – 12:30 **Focus on Adjustable Green-aware AI** (Chair F. Angiulli)

- **Adaptative Multi-Round Problems with Budget: Optimization and Learning** (Diodato Ferraioli)
- **CATALINA, a Cognitive Agent Practical Reasoning Architecture** (Massimo Cossentino)
- **Explaining Anomalies through Semi-supervised Autoencoders with Applications in Manufacturing Defects Localization** (Simona Nisticò and Rossella Devanna from Deloitte)

13:00 – 14:30 **Lunch**

14:30 – 16:00 **Projects developed by companies (Pitches and Posters)**

16:00 – 16:30 **Coffee Break**

16:30 – 18:00 **Focus on Green AI** (Chair D. Talia)

- **Towards Interpretable Energy Estimation for Edge AI Applications** (Riccardo Cantini)
- **Data/compute -efficient Machine Learning for Green AI** (Luigi Pontieri)
- **Meta-learning approaches for small-size clinical data** (Carlo Morabito)
- **Green-aware approaches for artificial Intelligence, bioinformatics and text mining** (Mario Cannataro)



Green-aware AI



2nd Year Workshop

March 25, 2025

SCHEDULE

9:00 – 10:00 **Focus on Green-aware XAI**

(Chair S. Greco)

- **Even-if explanations: formal foundations, priorities and complexity** (Gianvincenzo Alfano)
- **Strategic Reasoning with the Timed Concurrred Language for Argumentation** (Chiara Meo)
- **Argumentation for Informed Decisions with Applications to Energy Consumption in Computing** (Federico Cerutti, Massimiliano Giacomini)

10:00 – 12:00 **Focus on Interactions among Green-aware Agents**

(Chair M. Flammini) (with Coffee Break in the middle)

- **Fair Division with Social Impact** (Giovanna Varricchio)
- **Approximating Optimal Labelings for Temporal Connectivity** (Daniele Carnevale)
- **Black-Out Games** (Luca Moscardelli)
- **Synthetic Data Generation for Graph Dissimilarity Computation** (Pasquale De Meo)
- **Minimizing Energy Consumption by Minimizing Rosenthal's Potential** (Vittorio Bilò)

12:00 – 13:00 **Focus on AI for Green**

(Chair G. Terracina)

- **Artificial Intelligence Techniques and Multi-objective Optimization in Management of Renewable Resources** (Pirouz Behzad)
- **AI-based surface topography optimization through sustainable laser treatment: biomedical applications** (Maria Rosaria Saffioti)
- **A Collaborative Ecosystem for Industry 5.0** (Domenico Ursino)



Green-aware AI

