
Digging into the Landscape of Graphs Counterfactual Explainability

Lab @ AAI 2024

M.A. Prado-Romero – B. Prenkaj – G. Stilo



WHO ARE WE



Mario A. Prado-Romero

PhD. Candidate

Gran Sasso Science Institute



Bardh Prenkaj

PostDoc

Sapienza University of Rome



Giovanni Stilo

Associate Prof.

University of L'Aquila



We are part of the *Artificial Intelligence & Information Mining* (aiim – pronounced as i'm /aɪm/, and aim /eɪm/)
a collective of *Individuals* (/aɪm/) who share a common *Interest* (/eɪm/) in
Artificial Intelligence, Data Mining, and Machine Learning



ROADMAP

- **Part I: The GRETEL framework (20 mins) [STILO]**
 - Introduction to the challenges of developing and evaluating GCE methods
 - Basic explanation pipeline and evaluation
 - GRETEL's design, core components, and their interaction, focus on the configuration
- **Part II: Many explainers, one framework (20 mins) [MARIO]**
 - Analyzing how different SoTA approaches can be implemented into GRETEL
 - Search-based
 - Heuristic-based
 - Learning-based
 - Interpreting results of SoTA GCE methods
- **Part III: Extending the framework (60 mins) [BARDH]**
 - Extending the main components in custom scenarios
 - Analyzing the results to get further insights
 - Students Hands-on session using the SoBigData.it R.I.
- **Part IV: What's Next? (5 mins) [ALL]**
 - Open discussion on the future trends and development in the research/industry area



Coming Soon

Microsite

