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IEEE Italy Section

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Standard Practices for Data Processing in Recommender Systems

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On line: LINK

Abstract:

The recommendation pipeline typically encompasses several stages, from data preprocessing and model training to performance evaluation. Among these, data preprocessing has often been overlooked in the literature, resulting in limited standardization, comparability, and reproducibility of recommender systems. This seminar aims to address these issues by providing an in-depth discussion of established methodologies and best practices for data preprocessing in recommendation research and applications. The seminar will first introduce a structured taxonomy of data processing practices, outlining common strategies and their theoretical underpinnings. It will then illustrate how standardized preprocessing pipelines can improve experimental rigor and facilitate fair comparison across models and datasets.

Bio: **Tommaso Di Noia** is a Full Professor of Information and Data Management at the Polytechnic University of Bari, Italy. His research focuses primarily on Artificial Intelligence, with particular emphasis on machine learning, recommender systems, knowledge graphs, Semantic Web technologies, personalized information access, and preference representation and reasoning. His work also delves into Trustworthy AI, with special attention to adversarial machine learning, explainability, fairness, and privacy protection in recommendation models.
He has authored numerous papers in international journals, organized, and presented at major conferences in his research areas. He has received several "Best Paper Awards" for his work.

PhD students attending the lecture can request a certificate of attendance by sending an email after the lecture to: laura.giarre@unimore.it **and** graziana.cavone@uniroma3.it