Fabio Mercorio¹

Education. ► 2012: PhD In Computer Science - University of L'Aquila, Italy; ► 2008: Master Degree in Computer Science, score 110/110 with honours University of L'Aquila, Italy;

Research Interests. His research interests include: Artificial Intelligence: eXplainable AI, interpretable models, local and global interpretation, explanation through symbolic approaches, Labour Market Intelligence; Data Science: data quality and data cleaning, vector-space models, taxonomy refinement, Graph-database algorithms; AI Planning [formerly]: domain-independent planning, temporal continuous planning.

Current Positions. \blacktriangleright 2021 - present: Associate Professor of AI and Data Science at Department of Statistics and Quantitative Methods (DISMEQ), University of Milano-Bicocca, Italy. \blacktriangleright 2019 - present: Member of Scientific Committee and head of AI at CRISP (Interuniversity Research Centre on Public Services) of Unimib; \blacktriangleright 2020 - present: Deputy-Director of CRISP



Past Positions. ▶ 2018 - 2021: Assistant Professor in AI and Data Science Computer science at Department of Statistics and Quantitative Methods (DISMEQ), University of Milano-Bicocca, Italy. ▶ 2016 - 2018: Assistant Professor in Computer science at DISMEQ-Unimib; ▶ 2011 - 2016: PostDoc in Computer science at DISMEQ-Unimib; ▶ 2015 - 2016: Visiting researcher in AI Planning at King's College London, Department of Informatics, London, UK (collaboration with Prof. Dan Magazzeni);

Research Grants and Awards ▶ [2019] Research Talent Award I've received the first prize at the YoungTalentAward 2019 in collaboration with Accademia Nazionale Lincei in the Computer Science, Engineering & Mathematics area. "for his contribution on applying AI to labour market for describing and predicting labour market phenomena"; ▶ [2018] ASN - National Scientific Qualification for the position of Associate Professor in Computer Science, ANVUR; ▶ [2017] FFABR Research Grant for research productivity provided by Italian Ministry of research

Research Projects (only last 5 years). He has been involved as senior resercher or as the head of AI research unit in the following granted projects by applying his AI competencies.

- ▶ 2021-ongoing. H2020-SC6-TRANSFORMATIONS-2020 "PILLARS: Pathways to inclusive labour market" Apply AI and XAI to mitigate skill mismatch. Head of Unimib Unit
- ▶ 2021-ongoing. EUROSTAT "Towards the European Web Intelligence Hub European System for Collection and Analysis of Online Job Advertisement Data (WIH-OJA)" Apply AI and XAI to reason over million vacancies over EU. Head of Research Unit
- ▶ 2016-ongoing. CEDEFOP "Real-time Labour Market information on Skill Requirements: Setting up the EU system for online vacancy analysis" CEDEFOP (European Centre for the Development of Vocational Training). Realise a Online Job Vacancy real-time monitor for all the 27+1 EU countries. Head of Research Unit
- ▶ 2018-2020. SLEM Smart Legal Management granted by MIUR as PON project to process unstructured documents to to reduce legal risk through AI. Head of Research Unit
- ▶ The Observatory of Digital Competences (2016,2017,2018 and 2019) Granted by the Italian Unions of ICT (Assinform, Assintel, Assinter) with support of AgiD (Agenzia Italia Digitale) and MIUR. Measuring the pervasiveness of digital skills within occupations derived from the Web Italian Labour Market.
- ▶ 2020. AI4ESCO "A Data Driven Bridge Towards ESCO using AI Algorithms". Granted by EURES (call EaSI-EURES VP/2019/010). Realising a mapping-table allowing for matching job vacancies and CVs in the European Job Mobility Portal. Specifically, AI4ESCO employs AI algorithms (word-embeddings) to derive a machine-readable structure of the lexicon used within the Italian National Occupation Taxonomy (CP2011). Head of Research Unit
- ▶ 2019. ETF #2 "Digital innovation Big Data and Labour Market Information Phase 2: Rank Web Job vacancy sources continuation of the assignment ETF.93398" ETF (The European Training Foundation). Build-up a ranking of Web sources to realise a Real-time labour market monitoring system. Senior Expert

Service in Academia (Selection) ► (AICom) Associate Editor AI Communications - The European Journal of AI. Reviewer for: Artificial Intelligence, Applied Soft Computing, Applied Intelligence Robotics and Computer-Integrated Manufacturing, Future Generation Computer System, Knowledge-Based Systems, Computers in Industry. ► Program committee (Selection) AAAI (since 2016), IJCAI (2016, 2017, 2020), IJCAI-XAI (since 2017), ICAPS (since 2016)

► CO-desiner and Co-developer of the following research tools: ContrXT (2021) [Contrastive explanations of ML models]; GraphDBLP (2018) [Semantic Graph-Database of the DBLP dataset]; DiNo (2016) [Heuristic PDDL+ AI Planner]; UPMurphi (2010) [First PDDL+ AI Planner]

Spin-off (until 2018) Partner at TabulaeX Ltd (formerly spin-off company of Unimib) working on BI and Big Data Analytics. TabulaeX is now part of the Burning Glass Group.

 $^{^{1}}$ Date of birth: November 6^{th} , 1983. Update June 2022 - I authorise the processing of my personal information according to D.Lgs. 196/03.