Curriculum Vitae
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Vision. My long-term vision is a paradigm shift from an AI that passively serves the knowledge needs of organizations, to ground-breaking scientific and technological solutions that by-design support social as well as organisational values, empowering users and citizens in their interplay with public and private organizations. Such solutions pro-actively support audit and regulatory authorities, legislators, researchers, and public and private decision makers in data-driven socially-sensitive decision making with regard to the non-functional requirements of fairness, accountability, and interpretability of deployed AI models. In turn, they will foster user awareness and, subsequently, user participation in responsible and trustworthy AI.

Personal data and positions. I was born in 1971 in Italy. I hold a Ph.D. in Computer Science (1999, Univ. of Pisa). I am currently full professor of Computer Science (since 12/2016) at the Department of Computer Science at the University of Pisa, Italy. Previously, I was associate professor (1/2021 to 11/2016) and assistant professor (1/2000 to 12/2011) at the same university. I visited Université de la Réunion in France (twice in 2006 and 2008) and I was a fellow of the European Consortium on Informatics and Mathematics at the Rutherford Appleton Laboratory in Oxford, UK (1995). I was the coordinator of the Master degree program in Business Informatics (11/2013 to 3/2017), and member of the board and treasurer of the Italian Association for Artificial Intelligence (2003 to 2007). I am currently a member of the committee for Quality Assurance Auditing at the University of Pisa global level.

Teaching and supervision. I currently teach *Statistical methods for data science* and *Decision support databases* at Master level, and *Big data ethics* at post-Master level. In the past, I taught *Technologies for web marketing*, *Programming for data science*, *Business intelligence laboratory*, *Databases security and integrity*, *Formal methods in programming*. I am currently (co-)supervising 7 Ph.D. students.

Research activity. Since 2008, I pioneered the use of data mining for the discovery and prevention of discrimination against protected-by-law social groups in automated decision-making. The field has bloomed under the name of *Fairness in AI*. My research has also covered the relations between privacy and fairness, the segregation of groups in social networks, and, recently, the explanation of (AI) black box decisions. Regarding AI models and algorithms, since 2000, I worked on languages and systems for knowledge discovery, efficient decision tree induction, pattern mining and concept learning. Application scenarios covered CRM, operational risk, web caching, web personalization, security, economic networks. My earlier studies were in the field of formal proofs of (constraint) logic program properties: termination, correctness, type systems.

Research software. I (co-)developed systems for discrimination discovery (DD, DCUBE, , kNN for discrimination analysis), for eXplainable AI (LORE and XSPELLS), and for efficient decision tree induction (YaDT).

Professional activity. I was guest editor of the following special issues: *Computational methods for enforcing privacy and fairness in the knowledge society* (Artificial Intelligence and Law, June 2014), *Artificial Intelligence for society and economy* (Intelligenza Artificiale, June 2015), *Bias and Fairness in AI* (SIGKDD Explorations, June 2021), *Bias and fairness in AI* (Data Mining and Knowledge Discovery, forthcoming). I am associate editor of *Intelligenza Artificiale* (since 2016), an IOS Press journal. I was (co-)chair of *FAT* 2020 Conference on Fairness, Accountability, and Transparency*, and of *FAT-ML 2018 Workshop on Fairness, Accountability, and Transparency in Machine Learning*. I am a member of the steering committee of *FAT*/FAccT Conference on Fairness, Accountability, and Transparency* (since 2017) and of *FORC Symposium on Foundations Of Responsible Computing* (since 2019). I was a SPC-member of IJCAI 2022, 2021 and 2019, and of AAAI 2019. I was a PC member of AISTATS 2023, 2022, 2021, UAI 2022, 2021, ECML-PKDD 2022, 2021. I am a member of the IEEE P7003 Algorithmic Bias Working Group.

Awards. Honorable mention at the best-paper award competition at Discovery Science 2020. Honorable mention at the best-demo award competition of SIGMOD 2010. Best Italian Ph.D. Thesis in Theoretical Computer Science, assigned by the Italian Chapter of the European Association for Theoretical Computer Science.

Scientific projects. Coordinator of *ENFORCE: Computer science and legal methods for enforcing the personal rights of non-discrimination and privacy in ICT systems* (2010-2013), grantor: MIUR (Italian Ministry of University and Research), budget: *383K euro*, http://enforce.di.unipi.it/. Coordinator of partner unit of *NoBIAS: Artificial Intelligence without Bias* (2020-2023), grantor: European Commission, MSCA-ITN, budget: *4M euro*, https://nobias-project.eu/. Task leader of *TAILOR: Foundations of Trustworthy AI - Integrating Reasoning, Learning and Optimization* (2020-2023), https://tailor-network.eu/, Task T3.3 Fairness, Equity, and Justice by Design. Participant in the projects: *SoBigData++: Social Mining & Big Data Ecosystem plus plus* (2020-2023) https://plusplus.sobigdata.eu/; *HumaneAI: Toward AI Systems That Augment and Empower Humans by Understanding Us, our Society and the World Around Us* (2020-2023), https://www.humane-ai.eu/; *XAI: eXplanations of AI decision making* (2020-2024), https://xai-project.eu/.

Bibliography. I published in major AI journals (JMLR, MACH, IEEE IS, IEEE TKDE, DKE, JIIS, AMAI, ESwA, AI&L, ACM TCL, TPLP, JLP, ACM CSUR) and conferences (IJCAI, ICML, AAAI, ECAI, SIGKDD, IJCNN, ECML-PKDD, Siam SDM, ICAIL, ICTAI).

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