

JOSE M. ALVAREZ

University of Pisa, Computer Science, 56127, Italy [◇ cc-jalvarez.github.io](https://cc-jalvarez.github.io) [◇ jose.alvarez@sns.it](mailto:jose.alvarez@sns.it)

EDUCATION

- Ph.D. in Data Science** Nov 2020 - (Ex. May 2024)
Scuola Normale Superiore, Pisa, Italy
- M.Sc. in Econometrics and Empirical Economics**, *mention bien* Sep 2015 - May 2017
Toulouse School of Economics, Toulouse, France
- B.A. in Economics, History**, *summa cum laude* Sep 2011 - May 2015
University of Florida, Florida, USA

SELECTED EXPERIENCE

- Research Fellow** Nov 2020 - Present
Department of Computer Science, University of Pisa *Pisa, IT*
- Marie Skłodowska-Curie Early-Stage Researcher (ESR) with the [NoBIAS: AI without Bias](#) Innovative Training Network, an interdisciplinary project funded by the European Union's Horizon 2020
 - Collaborated continuously with the other 13 ESRs on a range of deliverables for the European Commission, such as a set of advisory reports and white papers, a book, and a testbed/code repository
 - Included three three-month research visits to SCHUFA Holding AG (Wiesbaden, DE), Generali (Milan, IT), and KU Leuven (Leuven, BE) to collaborate on fairness-related topics
- Senior Consultant – Operational & Financial Risk Modeler** May 2017 - Oct 2020
Deloitte *Brussels, BE*
- Designed, developed, and deployed statistical machine learning models for clients in the energy & utilities and financial sectors
 - Built an end-to-end time series forecasting tool (Clairvoyance) at the [Deloitte aiStudio](#) in Frankfurt, Germany, as the chosen Belgium representative
 - Conducted internal and external trainings in R programming, Git, Advanced Loss Given Default modeling (Basel II), and Survival Analysis modeling
- Summer Economist** Jun - Aug 2016
Cabinet Office, UK Government *London, UK*
- Provided insights via statistical analysis to policy makers on a range of topics, such as studying the volunteering determinants in the UK and the variation in electoral costs across local authorities

PUBLICATIONS

(* shared first author)

Jose M. Alvarez, Salvatore Ruggieri. “Counterfactual Situation Testing: Uncovering Discrimination under Fairness given the Difference.” *ACM Conference on Equity and Access in Algorithms, Mechanisms, and Optimization (EAAMO)*, pages 1-11, 2023. [\[paper\]](#) [\[code\]](#)

Carlos Mougan, **Jose M. Alvarez**, Salvatore Ruggieri, Steffen Staab. “Fairness implications of encoding protected categorical attributes.” *ACM Conference on Artificial Intelligence, Ethics, and Society (AIES)*, pages 454–465, 2023. [\[paper\]](#) [\[code\]](#)

Jose M. Alvarez*, Kristen M. Scott*, Bettina Berendt, Salvatore Ruggieri. “Domain Adaptive Decision Trees: Implications for Accuracy and Fairness.” *ACM Conference on Fairness, Accountability, and Transparency (FAccT)*, pages 423–433, 2023. [\[paper\]](#) [\[code\]](#)

Salvatore Ruggieri, **Jose M. Alvarez**, Andrea Pugnanna, Laura State, Franco Turini. “Can We Trust Fair-AI?” *AAAI Conference on Artificial Intelligence*, pages 15421–15430, 2023. [\[paper\]](#)

Matilde Lazzari, **Jose M. Alvarez**, Salvatore Ruggieri. “Predicting and explaining employee turnover intention.” *International Journal of Data Science and Analytics*, 14(3):279–292, 2022. [\[paper\]](#)

PREPRINTS

“The Initial Screening Order Problem” with Salvatore Ruggieri. [\[arXiv\]](#)

“What’s the Problem, Linda? The Conjunction Fallacy as a Fairness Problem.” [\[arXiv\]](#)

LEADERSHIP AND SERVICE

Reviewer for ACM FAccT (2023 -), NeurIPS (2023 -), ICLR (2023 -), AFT Workshop @ NeurIPS 2023, AFCP Workshop @ NeurIPS 2022.

European Workshop on Algorithmic Fairness (EWAf) [\[website\]](#) 2022 -

- Social media chair, and member of the advisory board for the 2024 (3rd) edition in Mainz, Germany
- Co-organizer, social media chair, and sponsorship co-chair for the 2023 (2nd) edition in Winterthur, Switzerland, with over a 100 participants

European Association for Algorithmic Fairness (EAAf) [\[website\]](#) 2023 -

- Co-founder of EAAf, which organizes EWAf, and member of the inaugural board

FELLOWSHIPS, GRANTS, AND AWARDS

Borsa di Ricerca (Research Scholarship)	2023 - 2024
Marie Skłodowska-Curie Fellowship	2020 - 2023
Phi Beta Kappa	2015
University of Florida’s Honors Program	2011 - 2015
Davis United World College Scholar	2011 - 2015

SKILLS

Programming	Python, R, Scala
Other	Git, L ^A T _E X, Stata, SQL
Languages	Spanish (Native), English (Fluent), Italian (Fluent), French (Intermediate)