Joao Marques-Silva Xcience

MARQUES-SILVA Joao (ORCID: 0000-0002-6632-3086)

Nationality: Portuguese, web site: http://jpmarquessilva.github.io/

CURRENT POSITION

Directeur de Recherche, CNRS, IRIT, Toulouse, France.



• EDUCATION

2004 Habil., University of Lisbon, Portugal

1995 PhD, Univ. Michigan, Ann

Arbor, MI, USA

1991 MsC (Engineer): (Tech.)

Univ. Lisbon, Portugal

• INTERNATIONAL RECOGNITION (honors, prizes)

- 2009: Computer-Aided Verification (CAV) Award for "fundamental contributions to the development of high-performance Boolean satisfiability solvers"
- 2023: Automated Software Engineering (ASE) Most Influential Paper award (2009-2011)
- 2008: SFI Stokes Professorship, Ireland (from 2009 until 2015)
- Best Researcher Award, INESC-ID/IST/U.Lisbon, 2013
- Excellent Teaching Award, IST/U.Lisbon, 2015
- Fellow of EurAI, since 2023
- Fellow of the IEEE, since 2016
- Fellow of AAIA, since 2022
- Invitation \& participation in more than ten Dagstuhl Seminars, and organization of a couple of Dagstuhl seminars, most of these in the last decade
- Keynote Talk at ICCECS 2023, Toulouse, France: https://www.irit.fr/iceccs2023/
- Invited talk at DX 2022, Toulouse, France: https://dx2022.sciencesconf.org/program
- Invited talk at CCIA 2021, Lleida, Spain: https://ebooks.iospress.nl/doi/10.3233/FAIA210109
- Invited talk at FAC 2021, Toulouse, France: https://projects.laas.fr/IFSE/FAC/previous/journ%C3%A9es-fac-2021/
- Keynote Talk at ICLP 2020, Rende, Italy: https://iclp2020.unical.it/invited-speakers
- Invited lectures at several Summer Schools since 2011: SAT 2011, 2012, 2013, 2016, 2019; CPCOML 2020, VMCAI (2019)
- Master class on XAI at CPAIOR 2021; Tutorials presented at IJCAI 2020, AAAI 2020, IJCAI 2019.
- SUPERVISION: 16 PhD students (2 ongoing), 14 post-doctoral researchers.
- SCIENTIFIC PRODUCTION: https://dblp.org/pid/s/JoaoPMarquesSilva.

• 5 MOST RELEVANT PAPERS (10 last years), Google Scholar Id: 1b9hppwAAAAJ, h index: 60

- 1. Yacine Izza, Xuanxiang Huang, Alexey Ignatiev, Nina Narodytska, Martin C. Cooper, João Marques-Silva: On computing probabilistic abductive explanations. International Journal of Approximate Reasoning. 159: 108939 (2023) [https://doi.org/10.1016/j.ijar.2023.108939]
- 2. João Marques-Silva, Alexey Ignatiev: Delivering Trustworthy AI through Formal XAI. AAAI Conference on Artificial Intelligence (AAAI) 2022: 12342-12350 [https://doi.org/10.1609/aaai.v36i11.21499]
- 3. Yacine Izza, João Marques-Silva: On Explaining Random Forests with SAT. International Joint Conference on Artificial Intelligence (IJCAI) 2021: 2584-2591 [https://doi.org/10.24963/ijcai.2021/356]
- 4. João Marques-Silva, Thomas Gerspacher, Martin C. Cooper, Alexey Ignatiev, Nina Narodytska: Explanations for Monotonic Classifiers. International Conference on Machine Learning (ICML) 2021: 7469-7479 [http://proceedings.mlr.press/v139/marques-silva21a.html]
- João Marques-Silva, Thomas Gerspacher, Martin C. Cooper, Alexey Ignatiev, Nina Narodytska: Explaining Naive Bayes and Other Linear Classifiers with Polynomial Time and Delay. Annual Conference on Neural Information Processing Systems (NeurIPS) 2020 [https://proceedings.neurips.cc/paper/2020/hash/eccd2a86bae4728b38627162ba297828-Abstract.html]

EDITORIAL ACTIVITIES

- 2009-2015: Associate Editor of Integration, 2009-2015
- 2005-date: Editorial Board member, Journal on Satisfiability, Boolean Modeling and Computation.
- 2007: Conference Chair of the 2007 International Conference on the Theory and Applications of Satisfiability Testing (SAT), Lisbon, Portugal.
- COLLABORATIONS: Monash University, Australia; Nanyang Nanyang Technological University, Singapore; National University of Singapore, Singapore; University of Oviedo, Spain; University of Lleida, Spain; University of Torino, Italy; University of Calabria, Italy; The Hebrew University, Israel.
- TEACHING ACTIVITIES (current or planned): extensive teaching experience, from 1995 until 2019.