Jorge Sousa Pinto – Short CV

Name: Jorge Miguel de Matos Sousa Pinto

Place and Date of Birth: 25-09-1969, Porto, Portugal **Nationality:** Portuguese

Tel (+351) 918764162 (mobile) **Email:** jsp@di.uminho.pt

Google Scholar: https://scholar.google.com/citations?user=45QPIOIAAAAJ&hl=en

ORCID: https://orcid.org/0000-0002-0892-3577

Present Positions and Academic Responsibilities

Since 2012, Associate Professor (with Habilitation from 2015) at the Computing Department of the University of Minho, with years of experience teaching programming and formal methods courses at the undergraduate and graduate level (including Analysis of Algorithms; Functional Programming; Semantics of Programming Languages; Formal Verification) // Research Coordinator at the High-assurance Software Laboratory (HASLab / INESC TEC) // Director of the MAP-i doctorate program in Computer Science, involving three top Portuguese universities [http://mapi.map.edu.pt]

Academic Degrees

Habilitation, Informatics. Univ. of Minho, 2015 // *Docteur de L'École Polytechnique* (PhD), Semantics, Proofs, and Languages. Supervisors: Radhia Cousot, Ian Mackie. École Polytechnique, France, 2001 // *Mestrado* (MSc), Informatics/Computer Science. Univ. of Minho, 1995 // *Licenciatura* (Engineering diploma), Electrical and Computer Engineering. Univ. of Porto, 1992

Scientific Areas of Interest

Program Verification: program logics, deductive verifiers, safety and security analysis, applications

Textbooks

- J. B. Almeida, M. J. Frade, J. S. Pinto, and S. M. de Sousa. *Rigorous Software Development: An Introduction to Program Verification*. ISBN: 978-0-85729-017-5. Springer-Verlag London Ltd, 2011.

Selected Papers

- C. B. Lourenço and J. S. Pinto. Why3-do: The Way of Harmonious Distributed System Proofs. *Proceedings of the 31st European Symposium on Programming (ESOP 2022)*, volume 13240 of *Lecture Notes in Computer Science*, 2022. Springer-Verlag.
- I. Alam, R. Halder, and J. S. Pinto. A Deductive Reasoning Approach for Database Applications using Verification Conditions. *Journal of Systems and Software*, 175:110903, 2021. Elsevier.
- J. C. Pereira, N. Machado, and J. S. Pinto. Testing for Race Conditions in Distributed Systems via SMT Solving. In Ahrendt W., Wehrheim H., editors, *Proceedings of the 14th International Conference on Tests and Proofs, (TAP@STAF 2020)*, volume 12165 of *Lecture Notes in Computer Science*, pages 122–140, Berlin, Heidelberg, 2020. Springer-Verlag.
- A. de Matos Pedro, J. S. Pinto, D. Pereira, and L. M. Pinho. Runtime verification of autopilot systems using a fragment of MTL-$\int$. *International Journal on Software Tools for Technology Transfer (STTT)*, 20(4):379–395, 2018. Springer.
- R. A. B. e Silva, N. N. Arai, L. A. Burgareli, J. M. P. de Oliveira, and J. S. Pinto. Formal verification with Frama-C: A Case Study in the Space Software Domain. *IEEE Trans. Reliability*, 65(3):1163–1179, 2016.
- J. B. Almeida, M. Barbosa, J. S. Pinto, and B. Vieira. Formal Verification of Side-channel Countermeasures Using Self-composition. *Science of Computer Programming*, 78(7):796–812, 2013. Elsevier.