## Publications - Rodrigo Otoni

Last Update in June 2025

## **Journal Papers**

- 3. Validation of CHC Satisfiability with ATHENA
  - R. Otoni, M. Blicha, P. Eugster, and N. Sharygina Formal Aspects of Computing (FAC), Just Accepted, 2025
- An Algebraic Language for Specifying Quantum Networks
  A. Buckley, P. Chuprikov, R. Otoni, R. Soulé, R. Rand, and P. Eugster Proceedings of the ACM on Programming Languages (PACMPL), 8(PLDI), 2024
- A Solicitous Approach to Smart Contract Verification
  R. Otoni, M. Marescotti, L. Alt, P. Eugster, A. Hyvärinen, and N. Sharygina
  ACM Transactions on Privacy and Security (TOPS), 26(2), 2023

## **Conference Papers**

- 7. Unsatisfiability Proofs for Horn Solving
  - R. Otoni, M. Blicha, M. Rivera, P. Eugster, J. Kofroň, and N. Sharygina 31st Int. Conf. on Tools and Algs. for the Construction and Analysis of Systems (TACAS'25) EASST Best Paper Award 🕇
- Monomorphism-based CGRA Mapping via Space and Time Decoupling C. Tirelli, R. Otoni, and L. Pozzi
   28th Design, Automation and Test in Europe Conference (DATE'25)
- 5. CHC Model Validation with Proof Guarantees R. Otoni, M. Blicha, P. Eugster, and N. Sharygina

18th International Conference on integrated Formal Methods (iFM'23)

Best Paper Award candidate

- 4. Symbolic Model Checking for TLA<sup>+</sup> Made Faster
  - R. Otoni, I. Konnov, J. Kukovec, P. Eugster, and N. Sharygina 29th Int. Conf. on Tools and Algs. for the Construction and Analysis of Systems (TACAS'23)
- 3. Theory-Specific Proof Steps Witnessing Correctness of SMT Executions R. Otoni, M. Blicha, P. Eugster, A. Hyvärinen, and N. Sharygina 58th ACM/IEEE Design Automation Conference (DAC'21)
- Accurate Smart Contract Verification Through Direct Modelling
  M. Marescotti, R. Otoni, L. Alt, P. Eugster, A. Hyvärinen, and N. Sharygina
  9th International Symposium on Leveraging Applications of Formal Methods (ISoLA'20)
- 1. Local Analysis of Determinism for CSP
  - R. Otoni, A. Cavalcanti, and A. Sampaio

20th Brazilian Symposium on Formal Methods (SBMF'17)

## **Other Papers**

- $2.\ Automatisierte\ Garantierte\ Blockchain-Technologie\ Verifizierung$ 
  - R. Otoni
  - GI Ausgezeichnete Informatikdissertationen 2023 (Band 24), 2024
- Towards an Algebraic Specification of Quantum Networks
  A. Buckley, P. Chuprikov, R. Otoni, R. Rand, R. Soulé, and P. Eugster
  1st Workshop on Quantum Networks and Distributed Quantum Computing (QuNet'23)