

Publication List

Stefan Balauca

June 2026

Published

1. Efficient constructions for simulating multi controlled quantum gates

S. Balauca, A. Arusoai

International Conference on Computational Science, pp. 179–194, 2022.

DOI: https://doi.org/10.1007/978-3-031-08760-8_16

Cited by: 41

Filename: 01_Balauca2022Efficient.pdf

2. Gaussian Loss Smoothing Enables Certified Training with Tight Convex Relaxations

S. Balauca, M.N. Müller, Y. Mao, M. Baader, M. Fischer, M. Vechev

Transactions on Machine Learning Research 07/2025.

URL: <https://openreview.net/forum?id=lknvxcjuos>

Cited by: 3

Filename: 02_Balauca2025Gaussian.pdf

3. CTBench: A library and benchmark for certified training

Y. Mao, **S. Balauca**, M. Vechev

International Conference on Machine Learning 2025.

URL: <https://proceedings.mlr.press/v267/mao25a.html>

Cited by: 11

Filename: 03_Mao2025Ctbench.pdf

4. Understanding the World’s Museums through Vision-Language Reasoning

A.A. Balauca, S. Garai, **S. Balauca**, R.U. Shetty, N. Agrawal, D.S. Shah, Y. Fu, et al.

International Conference on Computer Vision 2025.

URL: https://openaccess.thecvf.com/content/ICCV2025/html/Balauca_Understanding_Museum_Exhibits_using_Vision-Language_Reasoning_ICCV_2025_paper.html

Cited by: 4

Filename: 04_Balauca2025Understanding.pdf

5. MixAT: Combining Continuous and Discrete Adversarial Training for LLMs

C. Dékány, **S. Balauca**, R. Staab, D.I. Dimitrov, M. Vechev

Advances in Neural Information Processing Systems, 38, 86727–86760, NeurIPS 2025.

URL: https://proceedings.neurips.cc/paper_files/paper/2025/hash/7d767bab4b3baa37cb14133eb089ba3d-Abstract-Conference.html

Cited by: 8

Filename: 05_Dekany2025Mixat.pdf

Accepted for Publication

6. Experimental Comparison of a Classical CNN and a Hybrid Quantum-Classical Model for Dermoscopic Skin Lesion Classification

A.-G. Pâncă, M. Ciorăţanu, **S. Balauca**, A. Iftene

Accepted for publication at the 30th *International Conference on Knowledge-Based and Intelligent Information & Engineering Systems* 2026.

Filename: 06_Panca2026Experimental.pdf

Preprints

7. Practical Hybrid Quantum Language Models with Observable Readout on Real Hardware

S. Balauca, A.-A. Balauca, A. Iftene

URL: <https://arxiv.org/abs/2512.12710>

Filename: 07_Balauca2025Practical.pdf