AdAM: Adaptive Approximate Multiplier for Fault Tolerance in DNN Accelerators
Taheri, Mahdi; **Cherezova, Natalia**; Nazari, Samira; **Azarpeyvand, Ali**; **Ghasempouri, Tara**; **Daneshtalab, Masoud**; **Raik, Jaan**; **Jenihhin, Maksim** IEEE transactions on device and materials reliability 2024 / p. 66-75 : ill https://doi.org//10.1109/TDMR.2024.3523386

AdAM: adaptive fault-tolerant approximate multiplier for edge DNN accelerators
Taheri, Mahdi; **Cherezova, Natalia**; Nazari, Samira; **Rafiq, Ahsan**; **Azarpeyvand, Ali**; **Ghasempouri, Tara**; **Daneshtalab, Masoud**; **Raik, Jaan**; **Jenihhin, Maksim** 2024 IEEE European Test Symposium (ETS): ETS 2024 : May 20-24, 2024, The Hague, Netherlands : proceedings 2024 https://doi.org/10.1109/ETS61313.2024.10567161 Conference Proceedings at Scopus Article at Scopus Article at WOS

Challenges in using neural networks in safety-critical applications
Forsberg, H.; Linden, Jan; Hjorth, J.; Manefjord, T.; **Daneshtalab, Masoud** AIAA/IEEE Digital Avionics Systems Conference - Proceedings, 2020 AIAA/IEEE 39th Digital Avionics Systems Conference (DASC), Virtual Conference, October 11-16, 2020 : Proceedings 2020 / 7 p https://doi.org/10.1109/DASC50938.2020.9256519

Composing graph theory and deep neural networks to evaluate SEU type soft error effects
Balakrishnan, Aneesh; Lange, Thomas; Glorieux, Maximilien; Alexandrescu, Dan; **Jenihhin, Maksim** 9th Mediterranean Conference on Embedded Computing (MECO'2020), Budva, Montenegro, 8-11 June 2020 2020 https://doi.org/10.1109/MECO49872.2020.9134279

Data augmentation and teacher-student training for LF-MMI based robust speech recognition
Ullah, Asad; **Alumäe, Tanel** Text, Speech, and Dialogue : 21st International Conference, TSD 2018, Brno, Czech Republic, September 11-14, 2018 : proceedings 2018 / p. 403-410 https://doi.org/10.1007/978-3-030-00794-2_43 Conference Proceedings at Scopus Article at Scopus Article at WOS

DeepAxe : a framework for exploration of approximation and reliability trade-offs in DNN accelerators
Taheri, Mahdi; Riazati, Mohamad; **Ahmadilivani, Mohammad Hasan**; **Jenihhin, Maksim**; **Daneshtalab, Masoud**; **Raik, Jaan**; Sjödin, Mikael; Lisper, Björn 2023 24th International Symposium on Quality Electronic Design (ISQED) 2023 / 8 p. : ill https://doi.org/10.1109/ISQED57927.2023.10129353

DeepHLS: A complete toolchain for automatic synthesis of deep neural networks to FPGA
Riazati, Mohammad; **Daneshtalab, Masoud**; Sjodin, Mikael; Lisper, Bjorn ICECS 2020 - 27th IEEE International Conference on Electronics, Circuits and Systems, November 23-25, 2020, Virtual Conference : Proceedings 2020 / 4 p https://doi.org/10.1109/ICECS49266.2020.9294881

Exploration of Activation Fault Reliability in Quantized Systolic Array-Based DNN Accelerators
Taheri, Mahdi; **Cherezova, Natalia**; Ansari, Mohammad Saeed; **Jenihhin, Maksim**; Mahani, Ali; **Daneshtalab, Masoud**; **Raik, Jaan** 25th International Symposium on Quality Electronic Design (ISQED) 2024 / 8 p. : ill https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=10528372 https://doi.org/10.1109/ISQED60706.2024.10528372 Conference proceedings at Scopus Article at Scopus Article at WOS

FARMUR: fair adversarial retraining to mitigate unfairness in robustness
Mousavi, Seyed Ali; Mousavi, Hamid; **Daneshtalab, Masoud** Advances in Databases and Information Systems: 27th European Conference, ADBIS 2023, Barcelona, Spain, September 4–7, 2023 : proceedings 2023 / p. 133-145 https://doi.org/10.1007/978-3-031-42914-9_10 Conference proceedings at Scopus Article at Scopus

FORTUNE: A Negative Memory Overhead Hardware-Agnostic Fault TOleRance TechniqUe in DNNs
Nazari, Samira; **Taheri, Mahdi**; Azarpeyvand, Ali; Afsharchi, Mohsen; **Ghasempouri, Tara**; Herglotz, Christian; **Daneshtalab, Masoud**; **Jenihhin, Maksim** 2024 IEEE 33rd Asian Test Symposium (ATS) 2024 / p. 1-6 : ill https://doi.org//10.1109/ATS64447.2024.10915463 Conference proceedings at Scopus Article at Scopus Article at WOS

Gate-level graph representation learning : a step towards the improved stuck-at faults analysis
Balakrishnan, Aneesh; **Alexandrescu, Dan**; **Jenihhin, Maksim**; Lange, Thomas; Glorieux, Maximilien Proceedings of the Twenty Second International Symposium on Quality Electronic Design (ISQED) : Santa Clara, USA, 7-9 April 2021 2021 / p. 24-30 https://doi.org/10.1109/ISQED51717.2021.9424256

Heterogeneous Approximation of DNN HW Accelerators based on Channels Vulnerability
Cherezova, Natalia; Pappalardo, Salvatore; **Taheri, Mahdi**; **Ahmadilivani, Mohammad Hasan**; Deveautour, Bastien; Bosio, Alberto; **Raik, Jaan**; **Jenihhin, Maksim** 2024 IFIP/IEEE 32nd International Conference on Very Large Scale Integration (VLSI-SoC) 2024 / 4 p. : ill https://doi.org//10.1109/VLSI-SoC62099.2024.10767798 Conference proceedings at Scopus Article at Scopus

SAFFIRA: a Framework for Assessing the Reliability of Systolic-Array-Based DNN Accelerators
Taheri, Mahdi; **Daneshtalab, Masoud**; **Raik, Jaan**; **Jenihhin, Maksim**; Pappalardo, Salvatore; Jimenez, Paul; Deveautour, Bastien; Bosio, Alberto 2024 27th International Symposium on Design & Diagnostics of Electronic Circuits & Systems (DDECS) : 03-05 April 2024, Kielce, Poland 2024 / p. 19–24 : ill https://doi.org//10.1109/DDECS60919.2024.10508925

Special session : approximation and fault resiliency of DNN accelerators
Ahmadilivani, Mohammad Hasan; Barbareschi, Mario; Barone, Salvatore; Bosio, Alberto; **Daneshtalab, Masoud**; Torca, Salvatore Della; Gavarini, Gabriele; **Jenihhin, Maksim**; **Raik, Jaan**; **Taheri, Mahdi** 2023 IEEE 41st VLSI Test Symposium (VTS) : proceedings 2023 / 10 p. : ill https://doi.org/10.1109/VTS56346.2023.10140043 Conference proceeding at Scopus Article at Scopus Article at WOS

Special session: reliability assessment recipes for DNN accelerators
Ahmadilivani, Mohammad Hasan; Bosio, Alberto; Deveautour, Bastien; Dos Santos, Fernando Fernandes; Guerrero-Balaguera, Juan-David; **Jenihhin, Maksim**; Kritikakou, Angeliki; Sierra, Robert Limas; **Raik, Jaan**; **Taheri, Mahdi** 42nd IEEE VLSI Test Symposium, VTS 2024 2024 / 11 p. : ill https://doi.org/10.1109/VTS60656.2024.10538707 Conference proceedings at Scopus Article at Scopus Article at WOS

A systematic literature review on hardware reliability assessment methods for deep neural networks
Ahmadilivani, Mohammad Hasan; **Taheri, Mahdi**; **Raik, Jaan**; **Daneshtalab, Masoud**; **Jenihhin, Maksim** ACM Computing Surveys 2024 / art. 141, 39 p. : ill https://doi.org/10.1145/3638242 Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

ZED-TTE: Zone embedding and deep neural network based travel time estimation approach
Ounoughi, Chahinez; Yeferny, Taoufik; **Ben Yahia, Sadok** 2021 International Joint Conference on Neural Networks (IJCNN) : proceedings 2021 / 10 p https://doi.org/10.1109/IJCNN52387.2021.9533456 Conference Proceedings at Scopus Article at Scopus Article at WOS