

Accurate detection of paroxysmal atrial fibrillation with certified-GAN and neural architecture search

Asadi, Mehdi; Poursalim, Fatemeh; Loni, Mohammad; **Daneshtalab, Masoud**; Sjödin, Mikael; Gharehbaghi, Arash Scientific Reports 2023 / art. 11378, 16 p. : ill <https://doi.org/10.1038/s41598-023-38541-8>

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](#)

Adjustable self-healing methodology for accelerated functions in heterogeneous systems

Riazati, Mohammad; **Ghasempouri, Tara**; **Daneshtalab, Masoud**; **Raik, Jaan**; Sjödin, Mikael; Lisper, Bjorn 2020 23rd Euromicro Conference on Digital System Design (DSD), 26-28 August 2020, Kranj, Slovenia 2020 / p. 638-645 <https://doi.org/10.1109/DSD51259.2020.00104>

Analysing robustness of tiny deep neural networks

Mousavi, Hamid; Zoljodi, Ali; **Daneshtalab, Masoud** New Trends in Database and Information Systems : ADBIS 2023 Short Papers, Doctoral Consortium and Workshops : DOING, K-GALS, MADEISD, PeRS, Barcelona, Spain, September 4–7, 2023 : proceedings 2023 / p. 150-159 https://doi.org/10.1007/978-3-031-42941-5_14 [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Analysis and improvement of resilience for long short-term memory neural networks

Ahmadilivani, Mohammad Hasan; **Raik, Jaan**; **Daneshtalab, Masoud**; **Kuusik, Alar** 2023 IEEE International Symposium on Defect and Fault Tolerance in VLSI and Nanotechnology Systems (DFT) 2023 / 4 p <https://doi.org/10.1109/DFT59622.2023.10313559>

APPRAISER : DNN fault resilience analysis employing approximation errors

Taheri, Mahdi; **Ahmadilivani, Mohammad Hasan**; Jenihhin, Maksim; **Daneshtalab, Masoud**; **Raik, Jaan** 2023 26th International Symposium on Design and Diagnostics of Electronic Circuits and Systems (DDECS) 2023 / p. 124–127 : ill <https://ddecs2023.taltech.ee/> <https://doi.org/10.1109/DDECS57882.2023.10139468>

Assessment and Enhancement of Hardware Reliability for Deep Neural Networks = Riistvara töökindluse hindamine ja täiustamine süvanärvivõrkude jaoks

Ahmadilivani, Mohammad Hasan 2025 https://www.ester.ee/record=b5739227*est <https://digikogu.taltech.ee/et/Item/652d50e3-773f-4de5-897d-86531feb0d56> <https://doi.org/10.23658/taltech.19/2025>

An automated configuration framework for TSN networks

Houtan, Bahar; Bergström, Albert; Ashjaei, Mohammad; **Daneshtalab, Masoud**; Sjödin, Mikael; Mubeen, Saad 2021 22nd IEEE International Conference on Industrial Technology (ICIT) : proceedings 2021 / p. 771-778 <https://doi.org/10.1109/ICIT46573.2021.9453628>

AutoRIO : an indoor testbed for developing autonomous vehicles

Loni, Mohammad; **Daneshtalab, Masoud**; Sjödin, Mikael 2018 Proceedings of the Japan-Africa Conference on Electronics, Communications, and Computations (JAC-ECC) : December 16-18, 2018 Alexandria, Egypt 2018 / p. 69-72 : ill <https://doi.org/10.1109/JEC-ECC.2018.8679543>

AVB-aware routing and scheduling for critical traffic in time-sensitive networks with preemption

Berisa, Aldin; Zhao, Luxi; Craciunas, Silviu S.; Ashjaei, Mohammad; Mubeen, Saad; **Daneshtalab, Masoud**; Sjödin, Mikael RTNS '22: Proceedings of the 30th International Conference on Real-Time Networks and Systems 2022 / p. 207-218 <https://doi.org/10.1145/3534879.3534926>

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>

Comparative evaluation of various generations of Controller Area Network based on timing analysis

Berisa, Aldin; Panjevic, Adis; Kovac, Imran; Lyngbäck, Hans; Ashjaei, Mohammad; **Daneshtalab, Masoud**; Sjödin, Mikael; Mubeen, Saad 2023 IEEE 28th International Conference on Emerging Technologies and Factory Automation (ETFA) 2023 / p. 1-8 <https://doi.org/10.1109/ETFA54631.2023.10275549>

A comprehensive systematic review of integration of time sensitive networking and 5G communication

Satka, Zenepe; Ashjaei, Mohammad; Fotouhi, Hossein; **Daneshtalab, Masoud**; Sjödin, Mikael; Mubeen, Saad Journal of Systems Architecture 2023 / art. 102852, 22 p. : ill <https://doi.org/10.1016/j.sysarc.2023.102852>

Contrastive Learning for Lane Detection via cross-similarity

Zoljodi, Ali; Abadijoui, Sadegh; Alibeigi, Mina; **Daneshtalab, Masoud** Pattern Recognition Letters 2024 / p. 175-183 : ill
<https://doi.org/10.1016/j.patrec.2024.08.007> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Cost-effective fault tolerance for CNNs using parameter vulnerability based hardening and pruning

Ahmadilivani, Mohammad Hasan; Mousavi, Seyedhamidreza; **Raik, Jaan**; **Daneshtalab, Masoud**; **Jenihhin, Maksim** 2024 IEEE 30th International Symposium on On-line Testing and Robust System Design (IOLTS) : IOLTS 2024 : July 03rd-05th 2024, Rennes, Brittany, France 2024 / 7 p <https://doi.org/10.1109/IOLTS60994.2024.10616072> [Article at Scopus](#) [Article at WOS](#)

DASS: Differentiable architecture search for sparse neural networks

Mousavi, Hamid; Loni, Mohammad; Alibeigi, Mina; **Daneshtalab, Masoud** ACM transactions on embedded computing systems 2023 / art. 105, 21 p. : ill <https://doi.org/10.1145/3609385> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

DAT: deep learning-based acceleration-aware trajectory forecasting

Sharifi, Ali Asghar; Zoljodi, Ali; **Daneshtalab, Masoud** Journal of imaging 2024 / art. 321, 16 p. : ill
<https://doi.org/10.3390/jimaging10120321> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [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>

DeepFlexiHLS : Deep Neural Network Flexible High-Level Synthesis Directive Generator

Riazati, Mohammad; **Daneshtalab, Masoud**; Sjödin, Mikael; Lisper, Björn Riazati, M.; Daneshtalab, M.; Sjödin, M.; Lisper, B. 2022 / p. 1-6 <https://doi.org/10.1109/NorCAS57515.2022.9934617>

DeepHLS: A complete toolchain for automatic synthesis of deep neural networks to FPGA

Riazati, Mohammad; **Daneshtalab, Masoud**; Sjödin, Mikael; Lisper, Björn 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>

DeepVigor: Vulnerability Value RanGes and FactORs for DNNs' Reliability Assessment

Ahmadilivani, Mohammad Hasan; **Taheri, Mahdi**; **Raik, Jaan**; **Daneshtalab, Masoud**; **Jenihhin, Maksim** IEEE European Test Symposium (ETS) : Venice, Italy, 22-26 May 2023 : proceedings 2023 / 6 p. : ill <https://doi.org/10.1109/ETS56758.2023.10174133>

DeepVigor+: Scalable and Accurate Semi-Analytical Fault Resilience Analysis for Deep Neural Networks

Ahmadilivani, Mohammad Hasan; **Raik, Jaan**; **Daneshtalab, Masoud**; **Jenihhin, Maksim** arXiv.org 2024 / 14 p. : ill
<https://doi.org/10.48550/arXiv.2410.15742>

DenseDisp: Resource-Aware Disparity Map Estimation by Compressing Siamese Neural Architecture

Loni, Mohammad; Zoljodi, Ali; Maier, Daniel; Majd, Amin; **Daneshtalab, Masoud**; Sjödin, Mikael; Juurlink, Ben H.H.; Akbari, Reza 2020 IEEE Congress on Evolutionary Computation (CEC) : conference proceedings 2020 / 8 p
<https://doi.org/10.1109/CEC48606.2020.9185611>

Designing Compact Convolutional Neural Network for Embedded Stereo Vision Systems

Loni, Mohammad; Majd, Amin; Loni, Abdollah; **Daneshtalab, Masoud**; Sjödin, Mikael; Troubitsyna, Elena 2018 IEEE 12th International Symposium on Embedded Multicore/Many-core Systems-on-Chip : MCSoc 2018 : proceedings 2018 / p. 244–251 : ill
<https://doi.org/10.1109/MCSoc2018.2018.00049>

Developing a translation technique for converged TSN-5G communication

Satka, Zenepe; Pantzar, David; Magnusson, Alexander; Ashjaei, Mohammad; Fotouhi, Hossein; Sjödin, Mikael; **Daneshtalab, Masoud**; **Mubeen, Saad** Communication in Automation : 18th IEEE International Workshop on Factory Communication Systems 2022 : WFCS 2022 2022 / 8 p <https://doi.org/10.1109/WFCS53837.2022.9779191>

Efficient on-device transfer learning using activation memory reduction

Yoosefi, Amin; Mousavi, Hamid; **Daneshtalab, Masoud**; Kargahi, Mehdi 2023 Eighth International Conference on Fog and Mobile Edge Computing (FMEC) 2023 / p. 210-215 <https://doi.org/10.1109/FMEC59375.2023.10306182>

ELC-ECG: efficient LSTM cell for ECG classification based on quantized architecture

Mirsalari, Seyed Ahmad; Nazari, Najmeh; Ansarmohammadi, Seyed Ali; Sinaei, Sima; Salehi, Mostafa E.; **Daneshtalab, Masoud** 2021 IEEE International Symposium on Circuits and Systems (ISCAS), Daegu, Korea May 22-28, 2021 : proceedings 2021 / 5 p
<https://doi.org/10.1109/ISCAS51556.2021.9401261> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

End-to-end Timing Model Extraction from TSN-Aware Distributed Vehicle Software

Houtan, Bahar; Aybek, Mehmet Onur; Ashjaei, Mohammad; **Daneshtalab, Masoud**; Sjödin, Mikael; Mubeen, Saad 48th Euromicro Conference on Software Engineering and Advanced Applications : SEAA 2022 : proceedings 2022 / p. 366-369

<https://doi.org/10.1109/SEAA56994.2022.00064>

End-to-end timing modeling and analysis of TSN in component-based vehicular software

Houtan, Bahar; Aybek, Mehmet Onur; Ashjaei, Mohammad; **Daneshtalab, Masoud**; Sjödin, Mikael; Lundbäck, John; Mubeen, Saad 2023 IEEE 26th International Symposium on Real-Time Distributed Computing (ISORC) 2023 / p. 126-135
<https://doi.org/10.1109/ISORC58943.2023.00025>

Enhancing fault resilience of QNNs by selective neuron splitting

Ahmadilivani, Mohammad Hasan; Taheri, Mahdi; Raik, Jaan; Daneshtalab, Masoud; Jenihhin, Maksim 2023 IEEE 5th International Conference on Artificial Intelligence Circuits and Systems (AICAS) 2023 / 5 p. : ill
<https://doi.org/10.1109/AICAS7966.2023.10168633>

Enhancing global model performance in federated learning with non-IID data using a data-free generative diffusion model

Najafi, Mohammadreza; Daneshtalab, Masoud; Lee, Jeong-A; Saadloon, Ghazal; Shin, Seokjoo IEEE Access 2024 / p. 148230-148239 : ill <https://doi.org/10.1109/ACCESS.2024.3474056> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Evaluating the robustness of ML models to out-of-distribution data through similarity analysis

Lindén, Joakim; Forsberg, Håkan; **Daneshtalab, Masoud**; Söderquist, Ingemar New Trends in Database and Information Systems; ADBIS 2023 Short Papers, Doctoral Consortium and Workshops: AIDMA, DOING, K-Gals, MADEISD, PeRS, Barcelona, Spain, September 4–7, 2023, Proceedings 2023 / p. 348 - 359 https://doi.org/10.1007/978-3-031-42941-5_30

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 Proceedings of the Twenty Fifth International Symposium on Quality Electronic Design : ISQED 2024 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](#)

FaCT-LSTM : fast and compact ternary architecture for LSTM recurrent neural networks

Mirsalari, Seyed Ahmad; Nazari, Najmeh; Sinaei, Sima; Salehi, Mostafa E.; **Daneshtalab, Masoud** IEEE design & test 2022 / p. 45-53 <https://doi.org/10.1109/MDAT.2021.3070245>

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](#)

FastStereoNet : A fast neural architecture search for improving the inference of disparity estimation on resource-limited platforms

Loni, Mohammad; Zoljodi, Ali; Majd, Amin; Ahn, Byung Hoon; **Daneshtalab, Masoud**; Sjödin, Mikael; Esmaeilzadeh, Hadi IEEE Transactions on Systems, Man, and Cybernetics : Systems 2022 / p. 5222-5234 : ill <https://doi.org/10.1109/TSMC.2021.3123136> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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](#)

Guest editorial : Special issue on parallel, distributed, and network-based processing in next-generation embedded systems

Mubeen, Saad; Lo Bello, Lucia; **Daneshtalab, Masoud**; Saponara, Sergio Journal of Systems Architecture : the EUROMICRO Journal 2021 / art. 102159 <https://doi.org/10.1016/j.sysarc.2021.102159>

Improving motion safety and efficiency of intelligent autonomous swarm of drones

Majd, Amin; Loni, Mohammad; Sahebi, Golnaz; **Daneshtalab, Masoud** Drones 2020 / art. 48, 19 p. : ill
<https://doi.org/10.3390/drones4030048>

Investigating and analyzing CAN-to-TSN gateway forwarding techniques

Berisa, Aldin; Ashjaei, Mohammad; **Daneshtalab, Masoud**; Sjödin, Mikael; Mubeen, Saad 2023 IEEE 26th International Symposium on Real-Time Distributed Computing : ISORC 2023 : Nashville, Tennessee, USA, 23-25 May 2023 : proceedings 2023 / p. 136-145
<https://doi.org/10.1109/ISORC58943.2023.00026>

Keynote: cost-efficient reliability for Edge-AI chips

Jenihhin, Maksim; Taheri, Mahdi; Cherezova, Natalia; Ahmadilivani, Mohammad Hasan; Selg, Hardi; Jutman, Artur; Shibin, Konstantin; Tsertov, Anton; Devadze, Sergei; Kodamanchili, Rama Mounika; Rafiq, Ahsan; Raik, Jaan; Daneshtalab, Masoud 2024 IEEE 25th Latin American Test Symposium (LATS) 2024 / 2 p <https://doi.org/10.1109/LATS62223.2024.10534610> [Article at Scopus](#)

Message from Program Co-Chairs: PDP 2020

Daneshtalab, Masoud; Brorsson, Mats 2020 28th Euromicro International Conference on Parallel, Distributed and Network-Based Processing : PDP 2020, Västerås, Sweden, 11-13 March 2020 2020 / 1 p <https://doi.org/10.1109/PDP50117.2020.00006>

Methods for reliability assessment and enhancement of deep neural networks hardware accelerators =

Süvanärvivõrkude riistvara kiirendite töökindluse hindamine ja täiustamine

Taheri, Mahdi 2025 https://www.ester.ee/record=b5728368*est <https://digikogu.taltech.ee/et/Item/9cf79768-17bc-44ec-a828-e4ccf6cf93f1>
<https://doi.org/10.23658/taltech.4/2025>

Multi-level binarized LSTM in EEG classification for wearable devices

Nazari, N.; Mirsalari, Seyed Ahmad; Sinaei, S.; Salehi, M.E.; **Daneshtalab, Masoud** 2020 28th Euromicro International Conference on Parallel, Distributed and Network-Based Processing : PDP 2020, Västerås, Sweden, 11-13 March 2020 2020 / p. 175-181
<https://doi.org/10.1109/PDP50117.2020.00033>

Network-on-ReRAM for scalable processing-in-memory architecture design

Dabiri, Bitā; Modarressi, Mehdi; **Daneshtalab, Masoud** 24th Euromicro Conference on Digital System Design (DSD) 2021
<https://doi.org/10.1109/DSD53832.2021.00031>

NeuroPIM: flexible neural accelerator for processing-in-memory architectures

Bidgoli, Ali Monavari; Fattahi, Sepideh; Rezaei, Seyyed Hossein Seyyedaghaei; Modarressi, Mehdi; **Daneshtalab, Masoud** 2023 26th International Symposium on Design and Diagnostics of Electronic Circuits and Systems (DDECS) : May 3-5, 2023, Tallin, Estonia : proceedings 2023 / p. 51-56 <https://doi.org/10.1109/DDECS57882.2023.10139567>

NoM: network-on-memory for inter-bank data transfer in highly-banked memories

Rezaei, S.H.S.A.; Modarressi, M.; Ausavarungnirun, R.; Sadrosadati, M.; Mutlu, O.; **Daneshtalab, Masoud** IEEE computer architecture letters 2020 / p. 80-83 <http://dx.doi.org/10.1109/LCA.2020.2990599>

Preface from General Co-Chairs: PDP 2020

Daneshtalab, Masoud; Francesco, L.; Sjödin, Mikael 2020 28th Euromicro International Conference on Parallel, Distributed and Network-Based Processing : PDP 2020, Västerås, Sweden, 11-13 March 2020 2020 / 1 p
<https://doi.org/10.1109/PDP50117.2020.00005>

ProAct: Progressive Training for Hybrid Clipped Activation Function to Enhance Resilience of DNNs

Mousavi, Seyedhamidreza; **Ahmadilivani, Mohammad Hasan**; Raik, Jaan; Jenihhin, Maksim; **Daneshtalab, Masoud** arXiv.org 2024 / 12 p. : ill <https://doi.org/10.48550/arXiv.2406.06313>

QoS-MAN : a novel QoS mapping algorithm for TSN-5G flows

Satka, Zenepe; Ashjaei, Mohammad; Fotouhi, Hossein; **Daneshtalab, Masoud**; Sjödin, Mikael; Mubeen, Saad 2022 IEEE 28th International Conference on Embedded and Real-Time Computing Systems and Applications (RTCSA) 2022 / p. 220-227
<https://doi.org/10.1109/RTCSA55878.2022.00030>

Review, analysis, and implementation of path selection strategies for 2D NoCs

Singh, Rajendra; Bohra, Manoj Kumar; Hemrajani, Prashant; Kalla, Anshuman; Bhatt, Devershi Pallavi; Purohit, Nitin; **Daneshtalab, Masoud** IEEE Access 2022 / p. 129245 - 129268 <https://doi.org/10.1109/ACCESS.2022.3227460> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

RoCo-NAS : robust and compact neural architecture search

Geraeinejad, Vahid; Sinaei, Sima; Modarressi, Mehdi; **Daneshtalab, Masoud** 2021 International Joint Conference on Neural Networks (IJCNN) : proceedings 2021 / 8 I <https://doi.org/10.1109/IJCNN52387.2021.9534460> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

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>

Scalable parallel genetic algorithm for solving large integer linear programming models derived from behavioral synthesis

Fallah, Mohammad K.; Mirhosseini, M.; Fazlali, Mahmood; **Daneshtalab, Masoud** 2020 28th Euromicro International Conference on Parallel, Distributed and Network-Based Processing : PDP 2020, Västerås, Sweden, 11-13 March 2020 2020 / p. 390-394
<https://doi.org/10.1109/PDP50117.2020.00066>

Schedulability analysis of best-effort traffic in TSN networks

Houtan, Bahar; Ashjaei, Mohammad; **Daneshtalab, Masoud**; Sjödin, Mikael; Afshar, Sara; Mubeen, Saad 26th IEEE International Conference on Emerging Technologies and Factory Automation (ETFA) 2021 / 8 I <https://doi.org/10.1109/ETFA45728.2021.9613511>

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](#)

Supporting end-to-end data propagation delay analysis for TSN-based distributed vehicular embedded systems

Houtan, Bahar; Ashjaei, Mohammad; **Daneshtalab, Masoud**; Sjödin, Mikael; Mubeen, Saad Journal of Systems Architecture 2023 / art. 102911 <https://doi.org/10.1016/j.sysarc.2023.102911>

A symbiosis between population based incremental learning and LP-relaxation based parallel genetic algorithm for solving integer linear programming models

Fallah, Mohammad K.; Fazlali, Mahmood; **Daneshtalab, Masoud** Computing 2023 / p. 1121-1139 <https://doi.org/10.1007/s00607-021-01004-x>

Synthesising schedules to improve QoS of best-effort traffic in TSN networks

Houtan, Bahar; Ashjaei, Mohammad; **Daneshtalab, Masoud**; Sjödin, Mikael; Mubeen, Saad RTNS'2021 : 29th International Conference on Real-Time Networks and Systems 2021 / p. 68-77 <https://doi.org/10.1145/3453417.3453423>

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](#)

Zero-memory-overhead clipping-based fault tolerance for LSTM deep neural networks

Parchekani, Bahram; Nazari, Samira; **Ahmadilivani, Mohammad Hasan**; **Azarpeyvand, Ali**; **Raik, Jaan**; **Ghasempouri, Tara**; **Daneshtalab, Masoud** 37th IEEE International Symposium on Defect and Fault Tolerance in VLSI and Nanotechnology Systems, Harwell, Oxfordshire, Didcot, UK, October 8th - 10th, 2024 2024 / 4 p. : ill <https://doi.org/10.1109/DFT63277.2024.10753533> [Conference proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

TAS : Ternarized Neural Architecture Search for Resource-Constrained Edge Devices

Loni, Mohammad; Mousavi, Hamid; Riazati, Mohammad; **Daneshtalab, Masoud**; Sjödin, Mikael 2022 Design, Automation & Test in Europe Conference & Exhibition (DATE) : proceedings 2022 / p. 1115-1118 <https://doi.org/10.23919/DATE54114.2022.9774615>

3DLaneNAS : neural architecture search for accurate and light-weight 3D lane detection

Zoljodi, Ali; Loni, Mohammad; Abadijoui, Sadegh; Alibeigi, Mina; **Daneshtalab, Masoud** Artificial Neural Networks and Machine Learning - ICANN 2022 : proceedings. Part I 2022 / p. 404-415 https://doi.org/10.1007/978-3-031-15919-0_34 [Conference Proceedings at scopus](#) [Article at Scopus](#) [Conference Proceedings at WOS](#) [Article at WOS](#)

Time-Sensitive Networking in automotive embedded systems : state of the art and research opportunities

Ashjaei, Mohammad; Bello, Lucia Lo; **Daneshtalab, Masoud**; Patti, Gaetano; Saponara, Sergio; Mubeen, Saad Journal of Systems Architecture : the EUROMICRO Journal 2021 <https://doi.org/10.1016/j.sysarc.2021.102137>

TrajectoryNAS: a neural architecture search for trajectory prediction

Sharifi, Ali Asghar; Zoljodi, Ali; **Daneshtalab, Masoud** Sensors 2024 / 15, p. : ill <https://doi.org/10.3390/s24175696> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)