

## Publikacje wchodzące w skład cyklu

1. *XNOR CNNs in FPGA: real-time detection and classification of traffic signs in 4K – a demo*, **Dominika PRZEWŁOCKA**, Marcin KOWALCZYK, Tomasz KRYJAK, The 2019 conference on Design and Architectures for Signal and Image Processing : TEXPO graduate student research competition : 16–18 October, 2019, Montréal, Canada.
2. *Optimisation of a Siamese neural network for real-time energy efficient object tracking*, **Dominika PRZEWŁOCKA**, Mateusz WĄSALA, Hubert SZOLC, Krzysztof BŁACHUT, Tomasz KRYJAK, Computer Vision and Graphics : International Conference : ICCVG 2020 : Warsaw, Poland, September 14–16, 2020 : proceedings / eds. Leszek J. Chmielewski, Ryszard Kozera, Arkadiusz Orłowski. — [Cham] : Springer International Publishing, cop. 2020. — (Lecture Notes in Computer Science ; ISSN 0302-9743 ; LNCS 12334. Image Processing, Computer Vision, Pattern Recognition, and Graphics). — ISBN: 978-3-030-59005-5; e-ISBN: 978-3-030-59006-2.
3. *Exploration of hardware acceleration methods for an XNOR traffic signs classifier*, **Dominika PRZEWŁOCKA-RUS**, Marcin KOWALCZYK, Tomasz KRYJAK, Progress in image processing, pattern recognition and communication systems : proceedings of the conference (CORES, IP&C, ACS) – June 28–30 2021, eds. Michal Choraś, [et al.]. — Cham : Springer Nature Switzerland, cop. 2022. — (Lecture Notes in Networks and Systems ; ISSN 2367-3370 ; vol. 255). — ISBN: 978-3-030-81522-6; e-ISBN: 978-3-030-81523-3. — S. 34–45.
4. *Quantised Siamese tracker for 4K/UltraHD video stream – a demo*, **Dominika PRZEWŁOCKA-RUS**, Tomasz KRYJAK, FPL 2021: 31st international conference on Field-Programmable Logic and Applications : Dresden, Germany 30 August – 3 September 2021, IEEE, cop. 2021. — (International Conference on Field Programmable Logic and Applications ; ISSN 1946-1488). — Dod. ISBN: 978-1-6654-4243-5. — e-ISBN: 978-1-6654-3759-2.
5. *Towards real-time and energy efficient Siamese tracking – a hardware-software approach*, **Dominika PRZEWŁOCKA-RUS**, Tomasz KRYJAK, DASIP 2022 : 15th international workshop on Design and Architectures for Signal and Image Processing : Budapest, Hungary, June 20–22, 2022 : proceedings / ed. Karol Desnos, Sergio Pertuz. — Cham : Springer Nature Switzerland AG, cop. 2022. — (Lecture Notes in Computer

Science ; ISSN 0302-9743 ; LNCS 13425). — ISBN: 978-3-031-12747-2; e-ISBN: 978-3-031-12748-9. — S. 162–173.

6. *Power-of-two quantization for low bitwidth and hardware compliant neural networks*, **Dominika PRZEWŁOCKA-RUS**, Syed Shakib Sarwar, H. Ekin Sumbul, Yuecheng Li, Barbara De Salvo, TinyML research symposium 2022 : 28 march 2022.
7. *Energy efficient hardware acceleration of neural networks with power-of-two quantisation*, **Dominika PRZEWŁOCKA-RUS**, Tomasz KRYJAK, Computer Vision and Graphics : proceedings of the International Conference on Computer Vision and Graphics ICCVG 2022 : [19-21 September 2022, Warsaw], eds. Leszek J. Chmielewski, Arkadiusz Orłowski. — Cham : Springer Nature Switzerland AG, cop. 2023. — (Lecture Notes in Networks and Systems ; ISSN 2367-3370 ; LNNS 598). — ISBN: 978-3-031-22024-1; e-ISBN: 978-3-031-22025-8. — S. 225–236.
8. *Power-of-two quantized YOLO network for pedestrian detection with dynamic vision sensor*, **Dominika PRZEWŁOCKA-RUS**, Tomasz KRYJAK, DSD 2023 : 2023 26th euromicro conference on Digital System Design : 6–8 September 2023, Durres, Albania : proceedings / ed. by Smail Niar, Hamza Ouarnoughi, Amund Skavhaug. The Institute of Electrical and Electronics Engineers, cop. 2023. — (Proceedings (Euromicro Conference on Digital System Design) ; ISSN 2639-3859). — Dod. ISBN: 979-8-3503-4420-2. — e-ISBN: 979-8-3503-4419-6. — S. 39–45.
9. *Power-of-Two Quantized YOLO Network for Pedestrian Detection with Dynamic Vision Sensor*, **Dominika PRZEWŁOCKA-RUS**, Tomasz KRYJAK, DSD 2024 : 27th Euromicro Conference on Digital System Design (DSD), 28-30 August 2024, Sorbonne University, Paris, France

## Inne publikacje

10. *Hardware acceleration of face detection using a deep convolutional neural network – a demo*, **Dominika PRZEWŁOCKA**, Tomasz KRYJAK, The 2018 conference on Design and Architectures for Signal and Image Processing : October 10–12 2018, Porto, Portugal.
11. *Real-time implementation of contextual image processing operations for 4K video stream in Zynq UltraScale+ MPSoC*, Marcin KOWALCZYK, **Dominika PRZEWŁOCKA**, Tomasz KRYJAK, The 2018 conference on Design & Architectures for Signal & Image Processing, Porto, Portugal, October 10–12, 2018. IEEE, cop. 2018. — e-ISBN: 978-1-5386-8237-1.
12. *Real-time implementation of adaptive correlation filter tracking for 4K video stream in Zynq UltraScale+ MPSoC*, Marcin KOWALCZYK, **Dominika PRZEWŁOCKA**, Tomasz KRYJAK, The 2019 conference on Design and Architectures for Signal and Image Processing : 16–18 October, 2019, Montréal, Canada. IEEE, cop. 2019. — e-ISBN: 978-1-7281-4074-2.
13. *Real-time FPGA implementation of connected component labelling for a 4K video stream*, Piotr Ciarach, Marcin KOWALCZYK, **Dominika PRZEWŁOCKA**, Tomasz KRYJAK, Applied Reconfigurable Computing : 15th international symposium, ARC 2019 : Darmstadt, Germany, April 9–11, 2019 : proceedings, eds. Christian Hochberger, [et al.]. — Cham : Springer Nature Switzerland, cop. 2019. — (Lecture Notes in Computer Science ; ISSN 0302-9743 ; 11444). — ISBN: 978-3-030-17226-8; e-ISBN: 978-3-030-17227-5.
14. *Real-time FPGA implementation of parallel connected component labelling for a 4K video stream*, Marcin KOWALCZYK, Piotr Ciarach, **Dominika PRZEWŁOCKA-RUS**, Hubert SZOLC, Tomasz KRYJAK // Journal of Signal Processing Systems for Signal, Image, and Video Technology ; ISSN 1939-8018. — Tytuł poprz.: Journal of VLSI Signal Processing Systems for Signal, Image, and Video Technology ; ISSN: 1387-5485. — 2021 — vol. 93 iss. 5, s. 481–498.
15. *The bioinspired traffic sign classifier*, **Dominika PRZEWŁOCKA-RUS**, Tomasz KRYJAK, Bio-Algorithms and Med-Systems, Jagiellonian University. Medical College ; ISSN 1895-9091. — 2022 — vol. 18 iss. 1, s. 29–38.

16. *Systemy wizyjne w zastosowaniach przemysłowych — Computer vision systems in industrial applications*, Marek GORGON, Maciej ALEKSANDROWICZ, Krzysztof BŁACHUT, Andrzej BRODZICKI, Zbigniew BUBLIŃSKI, Artur Cyba, Michał DANIŁOWICZ, Adam GŁOWACZ, Mirosław JABŁOŃSKI, Joanna JAWOREK-KORJAKOWSKA, Aleksander KOSTUCH, Marcin KOWALCZYK, Tomasz KRYJAK, Dariusz KUCHARSKI, Konrad LIS, Michał MACHURA, Zbigniew MIKRUT, Piotr PAWLIK, Michał PIEKARSKI, **Dominika PRZEWŁOCKA-RUS**, Joanna STANISZ, Hubert SZOLC, Mateusz WĄSALA, Anna WÓJCICKA, Piotr WZOREK, *Nauka – technika – technologia : seria wydawnicza AGH, T. 5. — Kraków : Wydawnictwa AGH, 2022. — Materiały z konferencji naukowej "Wydział Elektryczny AGH – Wczoraj, Dziś i Jutro" : 23 czerwca 2022, Kraków. — ISBN: 978-83-66727-84-7; e-ISBN: 978-83-67427-00-5. — S. 17–31.*