

Articole publicate sau in curs de publicare:

1. **V. Miclea** and S. Nedevschi, "Real-Time Semantic Segmentation-Based Stereo Reconstruction," in *IEEE Transactions on Intelligent Transportation Systems*. doi: 10.1109/TITS.2019.2913883
2. **V. C. Miclea**, L. Miclea, and S. Nedevschi. Real-time stereo reconstruction failure detection and correction using deep learning. In The 21st IEEE International Conference on Intelligent Transportation Systems (ITSC), November 2018.
3. **V. C. Miclea**, L. Miclea, and S. Nedevschi. Increasing dependability of stereo reconstruction through deep learning. In Third IEEE International Workshop on Automotive Reliability and Test (ART18), October 2018.
4. **V. C. Miclea** and S. Nedevschi. Deep learning techniques for depth perception enhancement. In Deep Learning in Automated Driving Workshop at IEEE ICCP 2018, September 2018.
5. C. Timbus, **V. C. Miclea**, and C. Lemnaru. Semantic segmentation-based traffic sign detection and recognition using deep learning techniques. In 2018 IEEE 14th International Conference on Intelligent Computer Communication and Processing (ICCP), September 2018.
6. **V. C. Miclea** and S. Nedevschi. Real-time semantic segmentation-based depth upsampling using deep learning. In 2018 IEEE Intelligent Vehicles Symposium (IV), June 2018 - **Best Applicative Paper Award**, 2nd place.
7. **V. C. Miclea** and S. Nedevschi. Deep learning-based approaches for stereo reconstruction. In Deep Learning in Automated Driving Workshop at IEEE ICCP 2017, September 2017.
8. **V. Miclea** and S. Nedevschi. Semantic segmentation-based stereo reconstruction with statistically improved long range accuracy. In 2017 IEEE Intelligent Vehicles Symposium (IV), pages 1795–1802, June 2017.
9. **V. C. Miclea** and S. Nedevschi. Optimizing Census-based Semi Global Matching by genetic algorithms. In 2016 IEEE 12th International Conference on Intelligent Computer Communication and Processing (ICCP), pages 193–198, Sept 2016.
10. C. C. Vancea, **V. C. Miclea**, and S. Nedevschi. Improving stereo reconstruction by sub-pixel correction using histogram matching. In 2016 IEEE Intelligent Vehicles Symposium (IV), pages 335–341, June 2016.
11. **V. C. Miclea**, C. C. Vancea, and S. Nedevschi. New sub-pixel interpolation functions for accurate real-time stereo-matching algorithms. In 2015 IEEE International Conference on Intelligent Computer Communication and Processing (ICCP), pages 173–178, Sept 2015.
12. **V. C. Miclea**. Speeding-up polynomial multiplication on Virtex FPGAs: Finding the best addition method. In 2014 IEEE International Conference on Automation, Quality and Testing, Robotics, pages 1–5, May 2014.
13. **Vlad Miclea**. ProCoJuRi - A Processor Computing Just Right. Master Thesis, 2014.
14. **Vlad Miclea**. Cryptography on Reconfigurable Hardware – Polynomial Multiplication and the Function Field Sieve Algorithm. License Thesis, 2013.
15. **Vlad Miclea**. Addition Methods for the Implementation of Serial/Parallel Polynomial Multiplication on Virtex FPGAs. In Computer Science Students Conference, Cluj-Napoca, CSSC, 2013.

Lista contracte de cercetare:

- 1) "PN III PCCF SEPCA (Semantic Visual Perception and Integrated Control for Autonomous Systems)", Project 9/2018 (2019-2022)
- 2) "Autonomous parking and driving UP-DRIVE, Horizon 2020 project, Grant 688652 (2016-2019).
- 3) "Reconfigurable ROS-based Resilient Reasoning Robotic Cooperating Systems - R5-COP", FP7 ARTEMIS project, (2014-2017)
- 4) "Cooperative Advanced Driving Assistance System Based on Smart Mobile Platforms and Road Side Units – SmartCoDrive", grant funded by Romanian Ministry of Education and Research, code PN II PCCA 2011 3.2-0742 din 03.07.2012 (2012-2016).

Vlad-Cristian Miclea

