

Selected publications:

2017

1. Gábor Lékó, Péter Balázs. **Detecting Steel Cord Discontinuities in Tire Tread X-Ray Images: A Preliminary Study**. *International Journal of Circuits, Systems and Signal Processing* (NAUN) **11** 314-318 (2017).

2018

2. Gábor Lékó, Péter Balázs, László G. Varga. (2018) **Projection Selection for Binary Tomographic Reconstruction Using Global Uncertainty**. In: Campilho A., Karray F., ter Haar Romeny B. (eds) *Image Analysis and Recognition. ICIAR 2018. Lecture Notes in Computer Science*, vol 10882, pp 3-10. Springer, Cham
3. Gábor Lékó, Péter Balázs. (2019) **Sequential Projection Selection Methods for Binary Tomography**. In: Barneva R., Brimkov V., Kulczycki P., Tavares J. (eds) *Computational Modeling of Objects Presented in Images. Fundamentals, Methods, and Applications. CompIMAGE 2018. Lecture Notes in Computer Science*, vol 10986, pp 70-81. Springer, Cham.

2019

4. Gergely Pap, Gábor Lékó, Tamás Grósz. (2019) **A Reconstruction-Free Projection Selection Procedure for Binary Tomography Using Convolutional Neural Networks**. In: Karray F., Campilho A., Yu A. (eds) *Image Analysis and Recognition. ICIAR 2019. Lecture Notes in Computer Science*, vol 11662, pp 228-236. Springer, Cham
5. Gábor Lékó, Szilveszter Domány, Péter Balázs. (2019) **Uncertainty Based Adaptive Projection Selection Strategy for Binary Tomographic Reconstruction**. In: Vento M., Percannella G. (eds) *Computer Analysis of Images and Patterns. CAIP 2019. Lecture Notes in Computer Science*, vol 11679, pp 74-84. Springer, Cham
6. Gábor Lékó, Péter Balázs. **Scale Invariance in Projection Selection using Binary Tomography**. *Fundamenta Informaticae* 172 (2020) 129–142, IOS Press.
7. N. Korshunova, J. Jomo, G. Lékó, D. Reznik, S. Kollmannsberger, P. Balázs, and E. Rank. **From CT-Scans to material characterization: linear elastic mechanical behavior**. *Computational Engineering, Finance, and Science (cs.CE)* (*Submitted*)

2020

8. László G. Varga, Gábor Lékó, Péter Balázs. **Grayscale Uncertainty of Projection Geometries and Projections Sets**. *IWCIA 2020. Lecture Notes in Computer Science*, Springer. (*Accepted for publishing*)
9. Gábor Lékó, Péter Balázs. **Transmission Based Adaptive Automatic Tube Voltage Selection for Computed Tomography**. *IWCIA 2020. Lecture Notes in Computer Science*, Springer. (*Accepted for publishing*)

Other publications:

2017

1. Péter Balázs, Gábor Lékó, Zoltán Ozsvár, Gábor Petrovszki, Judit Szűcs, László Varga. **Design and implementation of the informatical system of a 3D industrial CT scanner.** *Abstracts of the 11th Conference of the Hungarian Association of Image Processing and Pattern Recognition, Sovata, Romania, January 24-27*, 10 pages (2017) (in Hungarian).

2018

2. Gábor Lékó, Péter Balázs, László G. Varga. **Projection selection using uncertainty in binary tomography.** *Abstracts of the 5th Winter School of PhD Students in Informatics and Mathematics, Debrecen, Hungary, 2-5 March, 2018*. pp. 30. ISBN 978-615-5586-23-1.
3. Gábor Lékó, Péter Balázs, László G. Varga. **Projection selection with sequential selection methods using different evaluation measures.** *Volume of Short Papers of the 11th Conference of PhD Students in Computer Science, Szeged, Hungary, 25-27 June, 2018*, pp. 79.

2019

4. Gábor Lékó, Péter Balázs, László Varga. **Projection Selection with Sequential Methods and using Global Uncertainty.** *Abstracts of the 12th Conference of the Hungarian Association of Image Processing and Pattern Recognition, Debrecen, Hungary, January 28-31*, 15 pages (2019) (in Hungarian).