

Publications of Gábor Lékó

Journal publications

- Gábor Lékó and Péter Balázs. “Detecting Steel Cord Discontinuities in Tire Tread X-Ray Images: A Preliminary Study”. In: *International Journal of Circuits, Systems and Signal Processing (NAUN)* 11 314-318 (2017), ISSN: 1998-4464.
- Gábor Lékó and Péter Balázs. “Scale Invariance in Projection Selection Using Binary Tomography”. In: *Fundamenta Informaticae* 172.2 (2020), pp. 129–142. DOI: [10.3233/FI-2020-1897](https://doi.org/10.3233/FI-2020-1897). IF: 1.204
- Nina Korshunova, John Jomo, Gábor Lékó, Daniel Reznik, Péter Balázs and Stefan Kollmannsberger. “Image-based material characterization of complex microarchitected additively manufactured structures”. In: *Computers & Mathematics with Applications* 80 (11 2020), pp. 2462–2480. ISSN: 0898-1221. DOI: [10.1016/j.camwa.2020.07.018](https://doi.org/10.1016/j.camwa.2020.07.018). IF: 3.370
- László G. Varga, Gábor Lékó, and Péter Balázs. “Grayscale Uncertainty and Errors of Tomographic Reconstructions Based on Projection Geometries and Projection Sets”. In: *The Visual Computer* (2022). DOI: [10.1007/s00371-022-02428-y](https://doi.org/10.1007/s00371-022-02428-y). IF: 2.601
- Joni Kemppainen, Ben Scales, Keivan Razban Haghghi, Jouni Takalo, Neveen Mansour, James McManus, Gábor Lékó, Paulus Saari, James Hurcomb, Andra Antohi, Jussi-Petteri Suuronen, Florence Blanchard, Roger C. Hardie, Zhuoyi Song, Mark Hampton, Marina Eckermann, Fabian Westermeyer, Jasper Frohn, Hugo Hoekstra, Chi-Hon Lee, Marko Huttula, Rajmund Mokso, Mikko Juusola. “Binocular Mirror-Symmetric Microsaccadic Sampling Enables Drosophila Hyperacute 3D-Vision”. *Proceedings of the National Academy of Sciences of the United States of America (PNAS)*. 119 (12) (2022). DOI: [10.1073/pnas.2109717119](https://doi.org/10.1073/pnas.2109717119). IF: 11.205

Full papers in conference proceedings

- Gábor Lékó and Péter Balázs. “Sequential Projection Selection Methods for Binary Tomography”. In: *Computational Modeling of Objects Presented in Images. Fundamentals, Methods, and Applications*. Ed. by Reneta P. Barneva et al. Vol. 10986. Cham: Springer International Publishing, 2019, pp. 70–81. ISBN: 978-3-030-20805-9. DOI: [10.1007/978-3-030-20805-9_7](https://doi.org/10.1007/978-3-030-20805-9_7).
- Gábor Lékó, Péter Balázs, and László G. “Projection Selection for Binary Tomographic Reconstruction Using Global Uncertainty”. In: *Image Analysis and Recognition*. Ed. by Aurélio Campilho, Fakhri Karray, and Bart ter Haar Romeny. Vol. 10882. Cham: Springer International Publishing, 2018, pp. 3–10. ISBN: 978-3-319-93000-8. DOI: [10.1007/978-3-319-93000-8_1](https://doi.org/10.1007/978-3-319-93000-8_1).
- Gábor Lékó, Szilveszter Domány, and Péter Balázs. “Uncertainty Based Adaptive Projection Selection Strategy for Binary Tomographic Reconstruction”. In: *Computer Analysis of Images and Patterns*. Ed. by Mario Vento and Gennaro Percannella. Vol. 11679. Cham: Springer International Publishing, 2019, pp. 74–84. ISBN: 978-3-030-29891-3. DOI: [10.1007/978-3-030-29891-3_7](https://doi.org/10.1007/978-3-030-29891-3_7).
- Gergely Pap, Gábor Lékó, and Tamás Grósz. “A Reconstruction-Free Projection Selection Procedure for Binary Tomography Using Convolutional Neural Networks”. In: *Image Analysis and Recognition*. Ed. by Fakhri Karray, Aurélio Campilho, and Alfred Yu. Vol. 11662. Cham: Springer International Publishing, 2019, pp. 228–236. ISBN: 978-3-030-27202-9. DOI: [10.1007/978-3-030-27202-9_20](https://doi.org/10.1007/978-3-030-27202-9_20).
- Gábor Lékó and Péter Balázs. “Transmission Based Adaptive Automatic Tube Voltage Selection for Computed Tomography”. In: *Combinatorial Image Analysis*. Ed. by Tibor Lukić et al. Vol. 12148. Cham: Springer International Publishing, 2020, pp. 199–208. ISBN: 978-3-030-51002-2. DOI: [10.1007/978-3-030-51002-2_14](https://doi.org/10.1007/978-3-030-51002-2_14).
- László G. Varga, Gábor Lékó, and Péter Balázs. “Grayscale Uncertainty of Projection Geometries and Projections Sets”. In: *Combinatorial Image Analysis*. Ed. by Tibor Lukić et al. Vol. 12148. Cham: Springer International Publishing, 2020, pp. 123–138. ISBN: 978-3-030-51002-2. DOI: [10.1007/978-3-030-51002-2_9](https://doi.org/10.1007/978-3-030-51002-2_9).

Other publications

- 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, Szováta, Romania, 24-27 January, 2017, 10 pages (in Hungarian).
- 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, 2-4 March, 2018, pp. 30.
- 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.
- Gábor Lékó, Péter Balázs, László G. Varga: Sequential projection selection methods and global uncertainty in projection selection, Abstracts of the 12th Conference of the Hungarian Association of Image Processing and Pattern Recognition, Debrecen, Hungary, 28-31 January, 2019, 15 pages (in Hungarian).