

## **Lefkovits László**

### **Cărți publicate**

**Cărți (manuale, monografii, tratate, îndrumare etc.) publicate în țară, la edituri recunoscute CNCS**

1. **Lefkovits László**, *Procesarea imaginilor de rezonanță magnetică cu aplicații în segmentarea tumorilor cerebrale*, University Press, Universitatea de Medicină, Farmacie și Științe Tehnice, Tg-Mures, 2018, pag. 191, ISBN 978-973-169-541-9
2. **Lefkovits László, Lefkovits Szidónia**, *Bazele programariiorientate pe obiecte in limbajul Java*, Petru Maior University Press, Tg-Mures, 2017, pag. 254, ISBN 9786065811355

### **Volum științific colectiv**

#### **Internațional**

1. **Laszlo Lefkovits, Szidonia Lefkovits, Simina Emerich, Raul Malutan**, Comparison of Classifiers for Brain Tumor Segmentation. In: Marius Roman (ed.): *In "5th International Conference on Advancements of Medicine and Health Care through Technology MediTech*, Cluj-Napoca, IFMBE Press, 2017, pp. 1–6.

### **Lucrări științifice**

#### **Lucrări științifice publicate în reviste cotate ISI**

1. **Lefkovits László, Lefkovits Szidónia, Simina Emerich**, Boosting Unsupervised Dorsal Hand Vein Segmentation with U-Net Variants, *Mathematics*, Vol. 10, No 15, 2022, ISSN 2227-7390, pp. 1–31.
2. **Lefkovits László, Szilágyi László, Lefkovits Szidónia**, HGG and LGG Brain Tumor Segmentation in Multi-Modal MRI Using Pretrained Convolutional Neural Networks of Amazon Sagemaker, *Applied Sciences*, Vol. 12, No 7, 2022, ISSN 2076-3417, pp. 1–24.

3. **Laszlo Lefkovits, Szidonia Lefkovits, Vaida Mircea-Florin**, An Opimized Segmentation Framework Applied to Glioma Delimitation, *Studies in Informatic and Control*, Vol. 26, No 2, 2017, pp. 203–212.

### **Lucrări științifice publicate în reviste indexate în baze de date internaționale (indicați și baza de date)**

1. **Lefkovits László, Lefkovits Szidónia**, U-Net architecture variants for brain tumor segmentation of histogram corrected images, *Acta Universitatis Sapientiae, Informatica*, Vol. 14, No 1, 2022, pp. 49–74., SCOPUS

2. **Lefkovits László, Szilágyi László, Iclănzan David**, A review on suppressed fuzzy c-means clustering models, *Acta Universitatis Sapientiae, Informatica*, Vol. 12, No 2, 2020, pp. 302–324., Scopus

3. **Gyórfi Ágnes, Kapás Zoltán, Lefkovits László, Salamon Bernadette, Szilágyi László, Iclănzan David, Szabó Zsófia**, Low and high grade glioma segmentation in multispectral brain MRI data, *Acta Universitatis Sapientiae, Informatica*, Vol. 10, No 1, 2018, pp. 110–132., DeGruyter

4. **David Iclanzan, László Szilágyi, Laszlo Lefkovits, Zoltán Kapás, Zsófia Szabó, Ágnes Gyórfi**, Low and high grade glioma segmentation in multispectral brain MRI data, *Acta Universitatis Sapientiae Informatica*, Vol. 2018, No 10/1, 2018, pp. 110–132., ACM Digital Library

### **Lucrări științifice publicate în volumele manifestărilor științifice**

1. **Lefkovits László, Szilágyi László, Lefkovits Szidónia**, Applications of Different CNN Architectures for Palm Vein Identification. In: Vicenc Torra, Yasuo Narukawa, Gabriella Pasi, Marco Viviani (ed.): *Modeling Decisions for Artificial Intelligence. MDAI 2019.*, Switzerland, Springer Cham, 2019, pp. 295–306., ISBN 978-3-030-26772-8

2. **Lefkovits László, Szilágyi László, Lefkovits Szidónia**, Brain Tumor Segmentation and Survival Prediction Using a Cascade of Random Forests. In: Alessandro Crimi, Mauricio Reyes, Spyridon Bakas, Hugo Kuijff, Farahani Keyvan (ed.): *Brainlesion: Glioma, Multiple Sclerosis, Stroke and Traumatic Brain Injuries. BrainLes 2018.*, Switzerland, Springer Cham, 2019, pp.

334–345., ISBN 978-3-030-11725-2

3. **Lefkovits László, Lefkovits Szidónia**, Combining Subspace Methods and CNN Segmentation for Iris Identification. In: Ieee Technical Committee (ed.): *2019 IEEE 17th World Symposium on Applied Machine Intelligence and Informatics (SAMI)*, Herlany, Slovakia, Slovakia, IEEE, 2019, pp. 305–310.

4. **Lefkovits László, Szilágyi László, Lefkovits Szidónia**, CNN Approaches for Dorsal Hand Vein Based Identification. In: Vaclav Skala (ed.): *Computer Science Research Notes, CSRN 2901*, Plzen, Czech Republic, University of West Bohemia, Czech Republic, 2019, pp. 51–60., ISBN 978-80-86943-38-1

5. **Gyórfi Ágnes, Kapás Zoltán, Lefkovits László, Szilágyi László, Szilágyi Sándor Miklós, Iclănzan David, Lefkovits Szidónia, Iantovics Barna László**, Automatic Brain Tumor Segmentation in Multispectral MRI Volumes Using a Random Forest Approach. In: Manoranjan Paul, Carlos Hitoshi Morimoto, Qingming Huang (ed.): *Pacific Rim Symposium on Image and Video Technology, Lecture Notes in Computer Science vol. 10749*, Heidelberg, Springer-Verlag, 2018, pp. 137–149.

6. **Lefkovits László, Lefkovits Szidónia**, Two-phase MRI brain tumor segmentation using Random Forests and Level Set Method. In: Vaclav Skala (ed.): *Computer Graphics, Visualization and Computer Vision WSCG 2018*, Plzen, University of West Bohemia, 2018, pp. 152–159., ISBN 978-80-86943-41-1

7. **Gyórfi Ágnes, Kapás Zoltán, Lefkovits László, Szilágyi László, Szilágyi Sándor Miklós, Szabó Zsófia**, Automatic segmentation of low-grade brain tumor using a random forest classifier and Gabor features. In: Ismeretlen Szerkesztő (ed.): *14th International Conference on Neural Computation, Fuzzy Systems and Knowledge Discovery (ICNC-FSKD 2018, Huangshan, China)*, Huangshan, IEEE, 2018, pp. 1106–1113., ISBN 9781538680971

8. **Lefkovits László, Lefkovits Szidónia, Simina Emerich**, Detecting the Eye and its Openness with Gabor Filters. In: Pirooska Haller, Béla Gyenge (ed.): *5TH INTERNATIONAL SYMPOSIUM ON DIGITAL FORENSIC AND SECURITY (ISDFS 2017)*, 345 E 47TH ST, NEW YORK, NY 10017 USA, IEEE, 2017, pp. 1–5., ISBN 978-1-5090-5834-1

9. **Lefkovits László, Lefkovits Szidónia, Simina Emerich**, Iris Identification Based on Feature Fusion with PCA and SVM. In: Branislav Vuksanovic, Jianhong Zhou, Antanas Verikas (ed.): *Proceedings of SPIE Tenth International Conference on Machine Vision*, Bellingham, WA 98227-

0010, SPIE, SPIE, 2017, pp. 1–9., ISSN 0277-786X

10. **Laszlo Lefkovits, Szidonia Lefkovits, Simina Emerich, Septimiu Crisan**, Human Identification Using Multi-region PCA for Iris Recognition. In: John Charlie, Anastasios Economides (ed.): *Intl. Conf. Advances in Computing, Communication and Information Technology- CCIT 2017 Zurich*, New York, NY 10004, USA, Institute of Research Engineers and Doctors, 2017, pp. 123–127., ISBN 978-1-63248-131-3

11. **Laszlo Lefkovits, Simina Emerich, Raul Malutan, Olimpiu Pop, Septimiu Crisan**, Dorsal Hand Vein Recognition based on Riesz Wavelet Transform and Local Line Binary Pattern. In: Ieee Technical Committee (ed.): *International Conference on Frontiers of Signal Processing (ICFSP 2017)*, Paris, IEEE, 2017, pp. 146–150., ISBN 978-1-5386-1038-1

### **Participări la conferințe științifice naționale și internaționale (ca autor)**

1. **Lefkovits László**, Cascade of Random Forest Classifiers for Brain Tumor Segmentation. *International Conference on Medical Image Computing and Computer Assisted Intervention / Nemzetközi konferencia az orvosi képalkotásról és a számítógéppel segített beavatkozásról / Conferința internațională privind computerele imaginii medicale și intervenția asistată de calculator*, 2018/09/16–2018/09/20, Granada, Spanyol

2. **Lefkovits László**, Two-phase MRI brain tumor segmentation using Random Forests and Level Set Methods. *Computer Graphics, Visualization and Computer Vision WSCG 2018 / Számítógépes grafika, vizualizáció és számítógépes megjelenítés WSCG 2018 / Grafică grafică, vizualizare și viziune asupra computerului WSCG 2018*, 2018/05/28–2018/06/01, Plzen, Csehország

3. **Lefkovits László, Lefkovits Szidónia, Simina Emerich**, Biometric Identification Based on Feature Fusion with PCA. *The 10th International Conference on Machine Vision / 10. Nemzetközi konferencia Gépi látás / A 10-a Conferință Internațională Vedere artificială*, 2017/11/13–2017/11/15, Bécs, Ausztria

4. **Lefkovits László, Lefkovits Szidónia, Simina Emerich**, Dorsal Hand Vein Identification Based on Geometric and Local Features. *6th International Conference on Recent Achievements in Mechatronics, Automation, Computer Science and Robotics / 6. Nemzetközi Konferencia a Mechatronika, az Automatizálás, a Számítógépes Tudomány és a Robotika legújabb eredményeiről / A 6-a Conferință Internațională privind Realizările Recente în Mecatronică, Automatizare, Informatică și Robotică*, 2017/10/20–2017/10/21, Tg-Mureș, România

5. **Simina Emerich, Raul Malutan, Simina Emerich, Septimiu Crisan, Olimpiu Pop, László Lefkovits**, Dorsal Hand Vein Recognition based on Riesz Wavelet Transform and Local Line Binary Pattern. *International Conference on Frontiers of Signal Processing / Nemzetközi Konferencia. Jelfeldolgozás Határai / Conferința internațională Frontierele procesării semnalelor*, 2017/09/06–2017/09/08, Párizs, Francia

6. **Lefkovits László, Szidonia Lefkovits, Septimiu Crișan, Simina Emerich**, Human Identification Using Multi-region PCA for Iris Recognition. *5th Intl. Conf. Advances in Computing, Communication and Information Technology (CCIT) / 5. Nemzetközi Konferencia. Előrehaladások a számítástechnikában, a kommunikációban és az információtechnológiában (CCIT) / A 5. Conferință Internațională. Progrese în tehnica de calcul, comunicații și tehnologia informației (CCIT)*, 2017/09/02–2017/09/03, Zürich, Svájc

7. **Lefkovits Szidónia, Lefkovits László, Simina Emerich**, Detecting the eye and its openness with Gabor filters. *International Symposium on Digital Forensic and Security / Nemzetközi jogi és biztonságtechnikai szimpózium / Simpozionul internațional privind criminalistica și securitatea digitală*, 2017/04/26–2017/04/28, Tg-Mureș, Románia