



CURRICULUM VITAE

Date personale:

Nume, Prenume: Lefkovits Szidónia

Titlu academic: conferențiar universitar

Departament: de Inginerie și Tehnologia Informației

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Domenii de interes (maximum 5 domenii, direcții):

Computer Vision

Procesarea imaginilor și Recunoașterea formelor

Inteligență artificială

Limbaje de programare

Activitate de cercetare:

1. Proiecte de cercetare (maximum 3 proiecte)

1. UEFISCDI Bridge Grant PN-III-P2-2.1-BG-2016-0343 intitulat: “Dezvoltarea unor tehnologii de simulare computațională 3D a circulației coronariene și perfuziei miocardice bazate pe imagistică de fuziune” director proiect: prof. univ. dr. Sándor-Miklós Szilágyi, octombrie 2016-2018 (2 ani), membru proiect
2. Proiect de cercetare DOMUS Hungarica, Academia de științe Maghiară Titlul proiectului „Study of Deep Learning based Convolutional Neural Network Architectures on High Performance Computing Systems used for Image Segmentation”, 5231/23/2018/HTMT, High Performance Computing Research Center, Debrecen Ungaria, director proiect
3. Proiect de cercetare UMFST „Procesarea imaginilor medicale bazate pe tehnici de inteligență artificială cu aplicații în segmentarea tumorilor cerebrale din imagini de rezonanță magnetică și a venelor din imagini infraroșu” Granturile interne de cercetare științifică finanțate de către UMFST G.E. Palade Tg. Mureș, 1 ianuarie 2020-iulie 2022 (1 an), director proiect

2. Lucrări publicate in extenso (maximum 5 lucrări)



1. **Szidónia Lefkovits**, László Szilágyi, László Lefkovits "Brain Tumor Segmentation and Survival Prediction Using a Cascade of Random Forests" Brainlesion: Glioma, Multiple Sclerosis, Stroke and Traumatic Brain Injuries, BrainLes, 21th International Conference On Medical Image Computing And Computer Assisted Intervention 2018. Lecture Notes in Computer Science, vol 11384. Springer, Switzerland, Print ISBN 978-3-030-11725-2, https://doi.org/10.1007/978-3-030-11726-9_30
2. **Szidónia Lefkovits**, László Lefkovits, László Szilágyi, "Applications of Different CNN Architectures for Palm Vein Identification" Lecture Notes in Computer Science (Lecture Notes in Artificial Intelligence), International Conference on Modeling Decisions for Artificial Intelligence, 2019 Springer, Print ISBN 978-3-030-26772-8, https://doi.org/10.1007/978-3-030-26773-5_26
3. **Szidónia Lefkovits**, Simina Emerich, László Szilágyi "Biometric System Based on Registration of Dorsal Hand Vein Configurations" Image and Video Technology. PSIVT 2017. Lecture Notes in Computer Science, vol 10799. Springer, Cham, Print ISBN 978-3-319-92752-7, https://doi.org/10.1007/978-3-319-92753-4_2
4. László Lefkovits, **Szidónia Lefkovits**, László Szilágyi "Brain Tumor Segmentation with Optimized Random Forest". In: Brainlesion: Glioma, Multiple Sclerosis, Stroke and Traumatic Brain Injuries. BrainLes, 19th International Conference On Medical Image Computing And Computer Assisted Intervention 2016. Lecture Notes in Computer Science, vol 10154. Springer, Cham, Print ISBN 978-3-319-55523-2, https://doi.org/10.1007/978-3-319-55524-9_9
5. Spyridon Bakas and Mauricio Reyes and Andras Jakab et al. **Szidónia Lefkovits**, László Lefkovits, et al. Menze, Björn. "Identifying the Best Machine Learning Algorithms for Brain Tumor Segmentation, Progression Assessment, and Overall Survival Prediction in the BRATS Challenge", 2018. <https://arxiv.org/abs/1811.02629>, <https://doi.org/10.17863/CAM.38755>