



CURRICULUM VITAE

Date personale:

Nume, Prenume: Szilágyi Sándor Miklós

Titlu academic: Profesor universitar

Departament: Inginerie electrică și tehnologia informației

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Domenii de interes (maximum 5 domenii, direcții):

Inteligența artificială, Modelarea sistemelor biomedicale, Inginerie software

Activitate de cercetare:

1. Proiecte de cercetare (maximum 3 proiecte)

1) Director de grant: 2016-2018: Development of new technologies based on fusion imaging for computerized 3D simulation of coronary flow and myocardial perfusion, Funded by UEFISCDI (Romania),
research grant: PN-III-P2-2.1-BG-2016-0343, 102222 EUR

2) Membru de Grant la nivel instituțional/UMFST; Titlu: „SOON – Social Network of Machines”, Orizont 2020, Future and Emerging Technologies (FET) programme



of

the European Union through the ERA-NET Cofund funding scheme, Proiect CHIST-ERA. Contract de finanțare UEFISCDI 101 din 17/04/2019. CO: Univ. of Applied Sciences Western Switzerland (HES-SO); P: Universitatea de Medicină, Farmacie, Științe și Tehnologie „George Emil Palade” din Târgu Mureș (UMFST), Romania; P: Slovak Academy of Sciences, Institute of Informatics (SAV), Slovakia; P: University of Oviedo (UNIOVI), Spain; Companii industriale implicate: C: Tornos SA (Tornos), Switzerland; C: MAT-obaly, s.r.o. (MAT), Slovakia; C: ArcelorMittal Innovación Investigación e Inversiones S.L. (AMI3), Spain. Perioada de implementare: FACULTATEA DE INGINERIE ȘI TEHNOLOGIA INFORMAȚIEI 3 ani, Data de începere a implementării proiectului 17.04.2019. Valoare totală proiect: 1.259.197 Euro; Buget UMFST (finanțare din proiect): 176.920 Euro.
<https://soon.umfst.ro/>

3) Membru la granturi:

2016-2017: Multimodal and high performance MRI/CT imaging platform intended for computational medicine, nanoparticles and hybrid imaging at atherothrombotic disease research, Romania, National research grant: POC-A1-A1.1.1-A-2015, ID P_34_465, 1.754 million EUR
2016-2020: Increase of the research capacity in vulnerable coronary plaque imaging based on advanced nanoparticle technologies, fusion imaging and computational simulations, Romania, National research grant: POC-A1-A1.1.4-E-2015, ID P_37_677, 2.263 million EUR

2. Lucrări publicate in extenso (maximum 5 lucrări)

- 1) Pablo Duchen, Christoph Leuenberger, **Sándor M. Szilágyi**, Luke Harmon, Jonathan Eastman, Manuel Schweizer, Daniel Wegmann: Inference of Evolutionary Jumps in Large Phylogenies using Lévy Processes, Systematic Biology, Volume 66, Issue 6, November 2017, Pages 950–963, **IF: 8.523**
- 2) Marco Galimberti, Christoph Leuenberger, Beat Wolf, **Sándor Miklós Szilágyi**, Matthieu Foll, Daniel Wegmann: Detecting Selection from Linked Sites Using an F-Model. Genetics Vol. 216/4:1205-1215, 2020, Oxford University Press, **IF: 2.891**
- 3) **Sándor M. Szilágyi**, László Szilágyi, Zoltán Benyó: A Patient Specific Electro-Mechanical Model of the Heart. Computer Methods and Programs in Biomedicine, 101(2):183-200 (2011), **IF: 1.516**
- 4) László Szilágyi, **Sándor M. Szilágyi**: A modified two-stage Markov clustering algorithm for large and sparse networks, Computer Methods and Programs in Biomedicine, 135:15-26, (2016), **IF: 2.50**



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- 5) **Sándor M. Szilágyi**, László Szilágyi: A fast hierarchical clustering algorithm for large-scale protein sequence data sets. Computers in Biology and Medicine 48:94–101 (2014), IF: 1.240