

Catalin Rusu

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EXPERIENȚA PROFESIONALĂ

Cercetător Coneural [2008 – 2010] Localitatea: Cluj

Cercetător Gwangju Institute of Science and Technology [2010]

Cercetător Frankfurt Institute for Advanced Studies [2011 – 2013]

Asistent universitar Universitatea Babeș-Bolyai [2013 – 2014] Localitatea: Cluj

Lector Universitar Universitatea Babeş-Bolyai [2014 – În curs]

EDUCAȚIE ȘI FORMARE PROFESIONALĂ

Licenta Matematica-Informatica

Universitatea Babeș-Bolyai [2003 – 2007] Localitatea: Cluj

Master Informatica Universitatea Babeș-Bolyai [2007 – 2008] Localitatea: Cluj

Doctor Informatica Universitatea Babeș-Bolyai [2008 – 2012] Localitatea: Cluj

COMPETENȚE LINGVISTICE

Limbă(i) maternă(e): română

Altă limbă (Alte limbi):

engleză COMPREHENSIUNE ORALĂ C1 CITIT C1 SCRIS C1 EXPRIMARE SCRISĂ C1 CONVERSAȚIE C1 germană

COMPREHENSIUNE ORALĂ C1 CITIT C1 SCRIS C1 EXPRIMARE SCRISĂ C1 CONVERSAȚIE C1

Niveluri: A1 și A2 Utilizator de bază B1 și B2 Utilizator independent C1 și C2 Utilizator experimentat

PUBLICAȚII

[2009]

Exploring the link between temporal difference learning and spike-timing-dependent plasticity

BMC Neuroscience 10 (Suppl 1), P201

[2010] A new spike train metric

BMC Neuroscience 11 (Suppl 1), P169

[2011]

Optimal network localization by particle swarm optimization

2011 IEEE International Symposium on Intelligent Control, 620-625

[2012]

Modeling the neurophysiology of TMS-induced I-waves

Front. Comput. Neurosci. Conference Abstract: Bernstein Conference 2012

[2014]

A new class of metrics for spike trains

Neural Computation 26 (2), 306-348

[2014]

A model of TMS-induced I-waves in motor cortex

Brain Stimulation 7 (3), 401-414

[2015]

A Model of TMS-induced I-waves in Motor Cortex

Brain Stimulation 8 (2), 407-408

[2017]

ROBBY: A NEUROROBOTICS CONTROL FRAMEWORK USING SPIKING NEURAL NETWORKS

Studia Universitatis Babes-Bolyai, Informatica 62 (2)

[2020]

An nlp approach to estimating effort in a work environment

2020 International Conference on Software, Telecommunications and Computer Networks (SoftCOM)

[2021]

Locating transverse cracks in prismatic beams using random forest method and the frequency drop

Romanian Journal of Acoustics and Vibration 18 (2), 119-125

[2022]

Quantifying Student Attention using Convolutional Neural Networks.

ICAART (3), 293-299

[2022]

Recommendation System for Student Academic Progress

ICAART (3), 285-292

[2022]

Beam damage assessment using natural frequency shift and machine learning

Sensors 22 (3), 1118

[2022]

Determining the severity of open and closed cracks using the strain energy loss and the Hill-Climbing method

Applied Sciences 12 (14), 7231

[2023]

Testing the Accuracy of Machine Learning-Based Crack Localization Methods using Damage Localization Coefficients

Romanian Journal of Acoustics and Vibration 20 (1), 59-66

[2023]

Estimating Confidence in Damage Position Predictions Made Involving ANN

International Conference on Mechanical System Dynamics, 1541-1549

Assessment of cracks in beams using changes in the measured frequencies and Particle Swarm Optimization

Vibroengineering Procedia 51, 29-34

[2023]

Determining the Temperature Using Natural Frequencies and Artificial Intelligence

Studia Universitatis Babeș-Bolyai Engineering, 18-26

[2024]

A Stacked Neural Network Model for Damage Localization

Sensors 24 (21), 7019