

Zsofia Lendek

Phone: (+40) 0264202578 (Work) | **Email address:** zsofia.lendek@aut.utcluj.ro | **Website:** lendek.net |

Address: Technical University of Cluj-Napoca, Memorandumului 28, 400114, Cluj-Napoca, Romania (Work)

● EDUCATION & TRAINING

15/07/2019 - CLUJ-NAPOCA, ROMANIA

HABILITATION- TECHNICAL UNIVERSITY OF CLUJ-NAPOCA, ROMANIA

10/03/2009 - DELFT, NETHERLANDS

PH.D.- DELFT UNIVERITY OF TECHNOLOGY

Level in EQF: 8

2003 - CLUJ-NAPOCA, ROMANIA

SYSTEMS ENGINEER- TECHNICAL UNIVERSITY OF CLUJ-NAPOCA, ROMANIA

Field(s) of study: Engineering and engineering trades not elsewhere classified | **Level in EQF:** 7

● WORK EXPERIENCE

01/10/2020 - CURRENT - CLUJ-NAPOCA, ROMANIA

FULL PROFESSOR TECHNICAL UNIVERSITY OF CLUJ-NAPOCA, ROMANIA

01/10/2013 - 30/09/2020 - CLUJ-NAPOCA, ROMANIA

ASSOCIATE PROFESSOR TECHNICAL UNIVERSITY OF CLUJ-NAPOCA, ROMANIA

01/10/2011 - 30/09/2013 - CLUJ-NAPOCA, ROMANIA

ASSISTANT PROFESSOR TECHNICAL UNIVERSITY OF CLUJ-NAPOCA, ROMANIA

15/03/2011 - 30/09/2011 - VALENCIENNES, FRANCE

POSTDOCTORATEUNIVERSITY DE VALENCIENNES ET DU HAINAUT CAMBRESIS

11/03/2009 - 15/03/2011 - DELFT, NETHERLANDS

POSTDOCTORATEDELFT UNIVERSITY OF TECHNOLOGY

● TEACHING

Optimization

Automation and Industrial Informatics, 4th year

Estimators in control of dynamic systems

Automation and Industrial Informatics, 4th year

● PUBLICATIONS

M. Bernal, A. Sala, Zs. Lendek, T. M. Guerra, *Analysis and Synthesis of Nonlinear Control Systems - A Convex Optimisation Approach*, Springer Cham, series *Studies in Systems, Decision and Control*, vol. 408, 978-3-030-90772-3

Zs. Lendek, T. M. Guerra, R. Babuska, B. De Schutter, *Stability Analysis and Nonlinear Observer Design Using Takagi-Sugeno Fuzzy Models*, Springer Germany, series *Studies in Fuzziness and Soft Computing*, vol. 262, 978-3-642-16775-1.

M. Susca, V. Mihaly, Zs. Lendek, I-C. Morarescu, P. Dobra, *Controller redesign to minimize uniform quantization errors in uncertain linear systems with fixed hardware constraints*. *Nonlinear Analysis: Hybrid Systems*, vol. 60, no. 101683, 2026

Y. Xia, Zs. Lendek, R.-E. Precup, R.K. Agarwal, I.J. Rudas, *Suction Cup-Type Prescribed Performance Fault-Tolerant Fuzzy Control for Nonlinear Systems Considering Actuator Power*. *IEEE Transactions on Cybernetics*, vol. 56, no. 1, pages 347-356, 2026

X. Hu, Y. Xia, Zs. Lendek, J. Cao, R.-E. Precup, *A novel dynamic prescribed performance fuzzy-neural backstepping control for PMSM under step load*. *Neural Networks*, vol. 190, no. 107627, 2025.

X. Lin, Y. Xia, Zs. Lendek, R.-E. Precup, I. Rudas, R.K. Agarwal, *Type-2 Fuzzy Single Hidden Layer Recurrent Neural Adaptive Terminal Super-Twisting Control of Robot Joint*. *IEEE Transactions on Fuzzy Systems*, vol. 33, no. 10, pages 3637-3650, 2025

M. Susca, V. Mihaly, Zs. Lendek, I-C. Morarescu, *A Passivity Analysis Tool for Linear Clustered Multi-Agent Systems*. *IEEE Control Systems Letters*, vol. 9, pages 739-744, 2025

Y. Xia, Zs. Lendek, Z. Geng, J. Li, J. Wang, *Adaptive Fuzzy Control for Stochastic Nonlinear Systems With Nonmonotonic Prescribed Performance and Unknown Control Directions*. *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, vol. 55, no. 2, pages 1102-1115, 2025.

B. Yousuf, R. Herzal, Zs. Lendek, and L. Busoniu, *Multi-Agent Active Multi-Target Search with Intermittent Measurements*. *Control Engineering Practice*, vol. 153, no. 106094, 2024.

● PROJECTS

2021 - 2022

HEROES: Control design for optimal estimation using heterogeneous sensors, CNCS - UEFISCDI, project number PN-III-P1-1.1-TE-2019-1956

2018 - 2019

ECOPACE: Estimation and control of delayed periodic systems: Application to engine optimization, CNCS - UEFISCDI, project number PN-III-P1-1.1-TE-2016-1265

2015 - 2017

Handling non-smooth effects in control of real robotic systems, CNCS - UEFISCDI, project number PN-II-RU-TE-2014-4-0942