

## PERSONAL INFORMATION

**Levente CZUMBIL**

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 ✉ [Levente.Czumbil@ethm.utcluj.ro](mailto:Levente.Czumbil@ethm.utcluj.ro)

Sex Male | Date of birth 06/09/1985 | Nationality Romanian / Hungarian

## WORK EXPERIENCE

01.03.2018 – prezent

**Lecturer**

 Technical University of Cluj-Napoca ([TUCN](#)), Faculty of Electrical Engineering ([FIE](#)), Electrotechnics and Measurements ([ETHM](#)), str. "Gh. Baritiu", No. 26-28, Cluj-Napoca, Romania

▪ Main activities and responsibilities: Research and Academic

Business or sector: Academic and Research

28.09.2015 – 28.02.2018

**Academic Assitant**

 Technical University of Cluj-Napoca ([TUCN](#)), Faculty of Electrical Engineering ([FIE](#)), Electrotechnics and Measurements ([ETHM](#)), str. "Gh. Baritiu", No. 26-28, Cluj-Napoca, Romania

▪ Main activities and responsibilities: Research and Academic

Business or sector: Academic and Research

01.10.2012 – 27.09.2015

**Research Assistant**

 Technical University of Cluj-Napoca ([TUCN](#)), Faculty of Electrical Engineering ([FIE](#)), Electrotechnics and Measurements ([ETHM](#)), str. "Gh. Baritiu", No. 26-28, Cluj-Napoca, Romania

▪ Main activities and responsibilities: Research and Academic

Business or sector: Academic and Research

## EDUCATION AND TRAINING

Jan.2016 – Mar.2016

**Postgraduate Course**
*"Nearly Zero Energy Building Retrofit" - Tehnici de Analiză și Practici de Implementare a Clădirilor cu Consum de Energie aproape Zeror (nZEB)*

 Technical University of Cluj-Napoca ([TUCN](#)), str. Memorandumului, No. 28, Cluj-Napoca, Romania

▪ European and national policies on energy efficiency in buildings and nZEB; Advanced techniques and tools for building energy consumption modeling and analysis; Construction materials and installation systems dedicated to nZEB buildings; Renewable Energy Sources for nZEB buildinds; Project management, financial and economic aspects regarding nZEB retrofit.

Oct.2009 – Sept.2012

**PhD in Electrical Engineering**

 Technical University of Cluj-Napoca ([TUCN](#)), str. Memorandumului, No. 28, Cluj-Napoca, Romania

▪ Applied Mathematics, Applied Electromagnetism, Numerical modeling of electromagnetic field applied research methodology, Design, optimization and control software environments, EMC, Research Activity

2009 – 2010

**Advanced Studies Diploma**
*"Computer Aided Design in Electrical Engineering*

 Technical University of Cluj-Napoca ([TUCN](#)), Faculty of Electrical Engineering ([FIE](#)), Electrotechnics and Measurements ([ETHM](#)), str. "Gh. Baritiu", No. 26-28, Cluj-Napoca, Romania

▪ Complements of mathematics in electrical engineering, Programming environments, Numerical modeling of the electromagnetic field, Electromagnetic compatibility, Electromagnetic field inverse problems, Computer aided design of electrical and electronic circuits, Multimedia Technologies

2004 – 2009 **Bachelor's degree in Electrical Engineering**  
 Technical University of Cluj-Napoca (**TUCN**), Faculty of Electrical Engineering (**FIE**), Electrotechnics and Measurements (**ETHM**), str. "Gh. Baritiu", No. 26-28, Cluj-Napoca, Romania

- Theoretical Electrical Engineering, Mechanical Engineering, Electronics, Electrical measurements, electrical machines, sensors and transducers, Electrical Installations

2000 – 2004 **Baccalaureate**  
 "Vasile Lucalui" High School, str. Culturii nr. 2, Baia Mare, Maramureş, România, [www.lucaciu.ro](http://www.lucaciu.ro)

- Mathematics, Informatics

**PERSONAL SKILLS**

Mother tongue(s) Hungarian, Romanian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B1	B1	B1	B1	B1
Replace with name of language certificate. Enter level if known.					

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user  
 Common European Framework of Reference for Languages

Communication skills ▪ Good communication skills gained through my professional experience

Organizational / managerial skills ▪ Leadership  
 ▪ Organizational skills (member in the local organizing committee of: *the 8th International Conference on Modern Power Systems (MPS2019 Cluj-Napoca)*; *the 7th International Conference on Modern Power Systems (MPS2017 Cluj-Napoca)* and *the 49th International Universities Power Engineering Conference (UPEC2014 Cluj-Napoca)*)  
 ▪ Team Work

Job-related skills ▪ Teaching skills obtained during the previous 7 years  
 ▪ Ability for synthesis and analysis of research related data  
 ▪ Numerical modeling of electric and magnetic fields  
 ▪ Using specialized software applications  
 ▪ Students tutoring to develop their diploma projects

Computer skills ▪ Good command of Microsoft Office™ tools (Word, Excel, Access, Power Point)  
 ▪ Numerical Evaluation and Calculus: MathCad, MatLab, Maple  
 ▪ Programming Environments: RAD Studio XE (Delphi, Pascal), Visual Studio (C++, C#), Visual Fox (Fox Pro), DreamWeaver (HTML, CSS), Fortran  
 ▪ Numerical Modelling: Ansoft Maxwell, Comsol Multiphysics, CDEGS, OrCad, PSCAD, ATP-Draw, EMTP-RV  
 ▪ Other software applications: Autocad, SolidWorks, Labview, Calculux, Adobe Flash

ANRE authorization ▪ Holder of ANRE type IIA / B authorization (No. 25626/2013)

Driving licence ▪ B Category

**ADDITIONAL INFORMATION**

Course Holder Numerical Methods, 2<sup>nd</sup> year, Medical Engineering, Bistrita

Research internships ▪ 9 month at University of West of England, Bristol, UK, 2014/2015  
 ▪ 5 months at Technological Educational Institution of West Maceonia, Kozani, Greece, 2011  
 ▪ 1 month at Aristotle University, Thessaloniki, Greece, 2010

Member in Research grants won through National or International Competition

- **“Re-Cognition - Renewable Cogeneration and Storage Technologies Integration for energy Autonomous Buildings”**, project funded by the EU HORIZON 2020 innovation programme under grant agreement H2020-LC-SC3-2018-RESTwoStages No. 815301/2019. Member in the research team of the Technical University of Cluj-Napoca, 2019-2021.
- **“SMEmPower Efficiency - A holistic framework for Empowering SMEs capacity to increase their energy efficiency”**, project funded by the EU HORIZON 2020 innovation programme under grant agreement H2020-LC-SC3-EE-2018 No. 847132/2019. Member in the research team of the Technical University of Cluj-Napoca, 2019-2021.
- **“DR-BOB – Demand Response in Block of Buildings”**, project funded by the EU HORIZON 2020 innovation programme under grant agreement H2020-EE-2015-2-RIA No. 696114/2016. Member in the research team of the Technical University of Cluj-Napoca, 2016-2018.
- **“MEnS – Meeting of Energy Skills”**, project funded by the EU HORIZON 2020 innovation programme under grant agreement H2020-EE-2014-CSA No. 649773/2014. Member in the research team of the Technical University of Cluj-Napoca, 2014-2017
- 3 national research grants (presented in the detailed List of Projects)

Project Manager in Grants

- **TUCN Internal Project CI2017\_IE\_3: „Efficient Modelling and Design Techniques for Complex HVAC/HVDC Power Distribution Corridors”**, No. 1987/12.07.2017, Technical University of Cluj-Napoca, 2017-2018.
- **Post-Doctoral Scholarship POSDRU/159/1.5/S/137516, PARTING** Research Grant, „Offering to the Industrial Environment of Modern Modelling, Prediction and Design Solutions with Maximum Performance in the View of Impact Reduction of Edycurrents on Above and Underground Metal Structures”, Technical University of Cluj-Napoca, 2014-2015.

Member in Grants with Industry

- 12 research grants with the industry (presented in the detailed List of Projects)

Published Books

- D. Şteţ, D.D. Micu & L. Czumbil: *Analiza, Modelarea și Predicția Fenomenelor de Interferență Electromagnetică dintre Linile Electrice de Înaltă Tensiune și Structurile Metalice Învecinate. Complementede de Matematici*, Ed. Mediamira, ISBN: 978-973-713-336-6, pag. 320, Cluj-Napoca, Romania, 2016.
- D.D. Micu, G.C. Christoforidis & L. Czumbil: „Artificial Intelligence Techniques Applied to Electromagnetic Interference Problems Between Power Lines and Metal Pipelines” in *Recurrent Neural Networks and Soft Computing*, Ed. InTech, ISBN: 978-953-51-0409-4, Ch. 12, pp. 253-274, Rijeka, Croatia, 2012.

1 Collection of problems, 1 Laboratory tutor (presented in the detailed List of Publications)

Published Papers

100 published papers, 20 as first author from which the most significant 5 are:

1. M. Ruba, F. Jurca, L. Czumbil, D.D. Micu, C. Marțiș, A. Polycarpou, R. Rizzo: „Synchronous Reluctance Machine Geometry Optimisation through a Genetic Algorithm based Technique”, *IET Electric Power Applications*, vol. 12, no. 3, pp. 431-438, 2018.
2. M.S. Munteanu, L. Czumbil, D.D. Micu, Ș.F. Braicu, S. Nemeti & M. Pîslaru: „Measurement of Soil Resistivity in order to Determine the Buried Walls Trajectory”, *Advances in Electrical and Computer Engineering (AECE)*, vol. 17, no. 1, pp. 103-108, 2017.
3. L. Czumbil, D.D. Micu, D. Şteţ & A. Ceclan: „A Neural Network approach for the Inductive Coupling between Overhead Power Lines and nearby Metallic Pipelines”, *International Symposium on Fundamentals of Electrical Engineering (ISFEE)*, Bucharest, Romania, June 30 – July 02, 2016.
4. D.D. Micu, G.C. Christoforidis & L. Czumbil: „AC Interference on Pipelines due to Double Circuit Power Lines: A detailed study”, *Electric Power System Research*, vol. 103, pp. 1-8, 2013.
5. D.D. Micu, L. Czumbil, G.C. Christoforidis & A. Ceclan: „Layer Recurrent Neural Network Solution for an Electromagnetic Interference Problem”, *IEEE Transaction on Magnetics*, ISSN: 0018-9464, vol. 47, no. 5, pp. 1410-1413, May, 2011.

ANNEXES

- Detailed List of Publications
- Detailed List of Projects

Date: 25.11.2019

Levente CZUMBIL