



# Cristina Ioana Muresan

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

## WORK EXPERIENCE

TECHNICAL UNIVERSITY OF CLUJ-NAPOCA – CLUJ-NAPOCA, ROMANIA  
PROFESSOR – 01/10/2022 – CURRENT

TECHNICAL UNIVERSITY OF CLUJ-NAPOCA – CLUJ-NAPOCA, ROMANIA  
ASSOCIATED PROFESSOR – 01/10/2016 – 30/09/2022

TECHNICAL UNIVERSITY OF CLUJ-NAPOCA – CLUJ-NAPOCA, ROMANIA  
LECTURER – 01/10/2012 – 30/09/2016

TECHNICAL UNIVERSITY OF CLUJ-NAPOCA – CLUJ-NAPOCA, ROMANIA  
ASSISTANT – 01/10/2011 – 30/09/2012

## EDUCATION AND TRAINING

01/10/2007 – 01/05/2011 Cluj-Napoca, Romania  
PHD IN SYSTEM ENGINEERING Technical University of Cluj-Napoca

01/05/2010 – 01/12/2010 Gent, Belgium  
DOCTORAL RESEARCH MOBILITY Gent University

01/10/2007 – 01/02/2009 Cluj-Napoca, Romania  
MASTER DEGREE IN ADVANCED PROCESS CONTROL Technical University of Cluj-Napoca

01/10/2002 – 01/07/2007 Cluj-Napoca, Romania  
BACHELOR DEGREE SYSTEM ENGINEERING Technical University of Cluj-Napoca

01/10/2002 – 01/07/2006 Cluj-Napoca, Romania  
ECONOMIST DEGREE Babes Bolyai University, Faculty of European Studies, Management of European Institutions

## LANGUAGE SKILLS

Mother tongue(s): **ROMANIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
<b>ENGLISH</b>	C2	C2	C2	C2	C2
<b>SPANISH</b>	B1	B1	A2	B1	A2
<b>FRENCH</b>	A1	A2	A1	A1	A1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

## ● PROJECTS

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01/10/2015 – 30/09/2017

**Principal Investigator, Novel Fractional Order Control Strategies for Vibration Suppression in Aeroplane Wings**

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Grant TE 86/1.10.2015 , approx. 115 000 eur

**Link** [www.cristina-muresan.com/research/te862015/](http://www.cristina-muresan.com/research/te862015/)

03/01/2017 – 03/07/2018

**Principal Investigator, Scalable experimental setup of nanorobot dynamics in Non-Newtonian fluids for fractional order modelling and control**

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Grant 92PED/2017 approx. 125 000 eur

**Link** [www.cristina-muresan.com/research/92ped2017/](http://www.cristina-muresan.com/research/92ped2017/)

02/05/2018 – 30/04/2020

**Principal Investigator, Robust fractional order event-based control for optimised resource allocation in complex cyber-physical closed loop system**

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Grant TE65/2018 approx. 95 000 eur

**Link** [www.cristina-muresan.com/research/te652018/](http://www.cristina-muresan.com/research/te652018/)

01/11/2020 – 31/10/2022

**Principal Investigator, Novel Fractional Order Autotuners for Poorly Damped Systems to Ensure Improved Safety and Comfort**

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Grant TE143/2020 approx. 88.500 eur

**Link** [www.cristina-muresan.com/research/te1432020/](http://www.cristina-muresan.com/research/te1432020/)

01/02/2023 – 31/07/2024

**Principal Investigator, CYBERMED- Cyber-medical solution for drug delivery systems using fractional calculus**

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PNRR-III-C9-2022 – I9, grant number 760018/27.01.2023, approx. 94.500 eur

**Link** [www.cristina-muresan.com/research/cybermed-pnrr-i9-grant-no-76001827-01-2023/](http://www.cristina-muresan.com/research/cybermed-pnrr-i9-grant-no-76001827-01-2023/)

01/07/2023 – 30/06/2026

**Co-director, Centre of Excellence in Computer Assisted Systems for Drug Dosing Control and Optimisation**

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Grant no PNRR-III-C9-2022 – I8 760068/23.05.2023 CF 134/15.11.2022 approx. 1 382 000 eur

**Link** [www.control.utcluj.ro/projects/optimdrug/#About](http://www.control.utcluj.ro/projects/optimdrug/#About)

## ● PUBLICATIONS

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**More than 150 publications, with an h-index of 22**

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**Link** <https://scholar.google.com/citations?user=MOwryR4AAAAJ&hl=en>

## ● HONOURS AND AWARDS

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11/05/2018

**Award for Scientific contributions of fractional order control to vibration suppression systems – 3rd IFAC Conf. on Advances in Proportional-Integral-Derivative Control, Ghent, Belgium**

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01/06/2016

**The 2016 Armen H. Zemanian Best Paper Award – Journal of Circuits, Systems, and Signal Processing**

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Award for paper "Improvements in Dissolved Oxygen Control of an Activated Sludge Wastewater Treatment Process" in the area of Circuits and Systems

01/06/2018

**The 2016 M.N.S. Swamy Best Paper Award – Journal of Circuits, Systems, and Signal Processing**

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Award for paper "Improvements in Dissolved Oxygen Control of an Activated Sludge Wastewater Treatment Process"

## ● **INVITED TALKS/LECTURES/SPEAKER**

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09/10/2016 – 12/10/2016

**Invited Speaker at the Workshop on “Women in Engineering” IEEE International Conference on Systems, Man, and Cybernetics (SMC 2016)**

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07/04/2015 – 10/04/2015

**Invited Lecturer at University of Cambridge**

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23/06/2015 – 27/06/2015

**Invited lecturer at the International Summer Course, University of Ghent**

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2013

**Tutorial lecturer “Who is afraid of the fractional order Laplace?”, IEEE Mediterranean Control Conference**

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30/07/2013 – 02/08/2013

**Invited lecturer at the International Summer Course, University of Ghent**

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04/10/2021 – 06/10/2021

**Invited speaker at the Second Online Conference on Nonlinear Dynamics and Complexity**

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## ● **ORGANISATIONAL SKILLS**

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2016 – CURRENT

**Associated editor at the International Journal of Dynamics and Control**

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2021 – CURRENT

**Associated Editor Mathematics MDPI**

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2022 – CURRENT

**Associated Editor Fractal and Fractional MDPI**

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**Special Sessions Chair at the IEEE International Conference on Automation, Quality and Testing, Robotics 2022, 2024**

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2023 – CURRENT

**Associated Editor ASME, Journal of Computational and Nonlinear Dynamics**

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