



# Gabriel Harja

**Place of birth:** Bistrița, Romania | **Nationality:** Romanian | **Gender:** Male | **Phone number:**

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## ● WORK EXPERIENCE

**TECHNICAL UNIVERSITY OF CLUJ-NAPOCA, AUTOMATION DEPARTMENT** – CLUJ-NAPOCA, ROMANIA  
**LECTURER** – FEB 2021 – CURRENT

Teaching and research

**TECHNICAL UNIVERSITY OF CLUJ-NAPOCA, AUTOMATION DEPARTMENT** – CLUJ-NAPOCA, ROMANIA  
**TEACHING ASSISTANT** – FEB 2016 – FEB 2021

Teaching and research

**TECHNICAL UNIVERSITY OF CLUJ-NAPOCA, AUTOMATION DEPARTMENT** – CLUJ-NAPOCA, ROMANIA  
**ENGINEER** – OCT 2013 – FEB 2016

Teaching and research

**ROBERT BOSCH SRL** – CLUJ-NAPOCA, ROMANIA  
**SOFTWARE DEVELOPER** – MAR 2019 – CURRENT

Development of mathematical models for vehicle propulsion systems.

## ● EDUCATION AND TRAINING

OCT 2015 – SEP 2019 Cluj-Napoca, Romania  
**PHD DEGREE** Technical University of Cluj-Napoca

**Field of study** System Engineering | **Level in EQF** EQF level 8

OCT 2013 – JUL 2015 Cluj-Napoca, Romania  
**MASTER'S DEGREE** Technical University of Cluj-Napoca, Automation Department

**Field of study** System Engineering | **Level in EQF** EQF level 7

OCT 2009 – JUL 2013 Cluj-Napoca, Romania  
**BACHELOR** Technical University of Cluj-Napoca, Automation Department

**Field of study** System Engineering | **Level in EQF** EQF level 6

2005 – 2009 Bistrița, Romania  
**BACCALAUREATE DIPLOMA** Colegiul Tehnic 'Infoel'

**Field of study** Mathematics and Computer Science | **Level in EQF** EQF level 4

## ● LANGUAGE SKILLS

Mother tongue(s): **ROMANIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
<b>ENGLISH</b>	C1	C1	B2	B2	B2
<b>FRENCH</b>	B1	B1	B1	B1	B1

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

## TEACHING ACTIVITY

2022 – CURRENT

### Digital Electronics

Curse for year II, Automation and Applied Informatics, romanian and english groups

2013 – CURRENT

### Digital Electronics

Laboratory for year II, Automation and Applied Informatics, romanian and english groups

2015 – CURRENT

### Electric and Electronic Control Equipment

Laboratory for year III, Automation and Applied Informatics, romanian and english groups

## PUBLICATIONS

2015

### Sisteme de Conducere a Proceselor Continue – Îndrumător de proiect.

**Authors:** Nașcu Ioan, Harja Gabriel, Bîrs Isabela Roxana | **Publisher:** U.T.PRESS, Cluj-Napoca

### Improvements in Dissolved Oxygen Control of an Activated Sludge Wastewater Treatment Process

Harja G., Nașcu I., Mureșan C., Nașcu I., Improvements in Dissolved Oxygen Control of an Activated Sludge Wastewater Treatment Process, Circuits Systems and Signal Processing, June 2016, Volume 35, Issue 6, pp 2259-2281, DOI:10.1007/s00034-016-0282-y

### Fractional order PI control strategy on an activated sludge wastewater treatment process

Harja G., Mureșan C., Nașcu I., Vlad G., Fractional order PI control strategy on an activated sludge wastewater treatment process, 17th International Conference on System Theory, Control and Computing (ICSTCC), 2015, Cheile Grădiștei, DOI:10.1109/ICSTCC.2015.7321355

### Control of an Activated Sludge Wastewater Treatment Process based on a Calibrated and Modified BSM1 Model

Harja G., Nascu I., Control of an Activated Sludge Wastewater Treatment Process based on a Calibrated and Modified BSM1 Model, 20th International Carpathian Control Conference, 26-29 May, 2019, Kraków - Wieliczka, Poland

### Advanced control for nitrogen removal of an intermittently operated ASWWTP

Harja G., Nascu I., Advanced control for nitrogen removal of an intermittently operated ASWWTP, 2020 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR), 21-23 May 2020, Cluj-Napoca, Romania, DOI: 10.1109/AQTR49680.2020.9129992

## ● **PROJECTS**

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### **Member in 5 research projects:**

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1. Project nr. 274/01/07/2014, Project code: PN-II-PT-PCCA-2013-4-1649
2. Project PN-II-RU-TE-2014-4-0598, TE86/2015
3. Project CI 66/2017
4. Project CI 201/2018
5. Project UEFISCDI: PN-III-P2-2.1-PED-2021-1147