

George Dan MOIȘ

Date of birth: 09/08/1984 | **Nationality:** Romanian | **Phone number:** (+40) 0740186041 (Mobile) | **Email address:** George.Mois@aut.utcluj.ro | **LinkedIn:** <https://www.linkedin.com/in/george-dan-mois-b67127ab/>

● WORK EXPERIENCE

01/10/2021 – CURRENT Cluj-Napoca, Romania

ASSOCIATE PROFESSOR TECHNICAL UNIVERSITY OF CLUJ-NAPOCA

- Didactic: Embedded systems (course), Programmable equipment (course), Micro-systems and data acquisition (course)
- Research: embedded systems, IoT systems, low-power design, wireless sensors, measurement and control equipment

Address Cluj-Napoca, Romania

01/01/2022 – CURRENT Cluj-Napoca, Romania

SENIOR ENGINEER, SOFTWARE DEVELOPMENT ENGINEERING ANALOG DEVICES

Embedded Software - microcontroller no-OS drivers & Linux drivers

Address Cluj-Napoca, Romania

05/11/2017 – 31/12/2021

SOFTWARE DEVELOPER BOSCH GROUP ROMANIA

R&D, Innovation and Relations with the Academia Group

- Management of innovation projects
- Organization of Bosch Future Mobility Challenge

Address Cluj-Napoca, Romania

30/09/2012 – 30/09/2021 Cluj-Napoca, Romania

LECTURER TECHNICAL UNIVERSITY OF CLUJ-NAPOCA

- Didactic: Embedded systems (course), Numerical and analog circuits (laboratory), Programmable equipment (course)
- Research: embedded systems, low-power design, wireless sensors, measurement and control equipment, FPGAs

Address Cluj-Napoca, Romania

21/08/2016 – 30/10/2017

SOFTWARE ENGINEER ALTRAN ROMANIA SRL

- Work on C projects for external customer

Address Cluj-Napoca, Romania

30/04/2013 – 31/07/2016 Craiova, Romania

CONSULTANT SYNCHRO S.R.L.

- End-to-end development of industrial measurement and control equipment (firmware, technical documentation)

Address Craiova, Romania

30/09/2011 – 30/09/2012

ASSISTANT TECHNICAL UNIVERSITY OF CLUJ-NAPOCA

- Didactic: Reliability and diagnosis (laboratory), Numerical and analog circuits (laboratory)
- Research: embedded systems, wireless sensors, reconfigurable systems, FPGAs

Address Cluj-Napoca, Romania

● EDUCATION AND TRAINING

12/2018 – 21/03/2019 Ludwigsburg, Germany

DISCOVERY - GROW PLATFORM GMBH - ADVANCED LEVEL | 10 WEEKS IN PART-TIME grow platform GmbH

Address Ludwigsburg, Germany

23/11/2018 – 25/11/2018 Ludwigsburg, Germany

EXPEDITION - GROW PLATFORM GMBH - INTERMEDIATE LEVEL | 2.5 DAYS grow platform GmbH

Address Ludwigsburg, Germany

19/05/2016 – 22/05/2016 Rotterdam, Netherlands

SPRING SCHOOL Test Spring School 2016 - Dependable systems: The enabler for future Autonomous Cars

Address Rotterdam, Netherlands

21/05/2015 – 24/05/2015 Cluj-Napoca, Romania

SPRING SCHOOL Test Spring School 2015 - Emerging Trends in Dependability

Address Cluj-Napoca, Romania

31/08/2014 – 30/09/2014 Torino, Italy

SHARING OF EXPERIENCE WITHIN THE RO-IT BILATERAL PROJECT „DESIGNING CLOUD-BASED SELF-HEALING CYBER-PHYSICAL SYSTEMS" Politecnico di Torino, Dipartimento di Automatica e Informatica

Address Torino, Italy

07/09/2014 – 09/09/2014 Lugano, Switzerland

SUMMER SCHOOL Cyber Physical Systems for Industrial Applications: Wireless self-powered vibration monitoring and

Address Lugano, Switzerland

15/09/2013 – 17/09/2013 Roma, Italy

SUMMER SCHOOL First international training school on Manufacturable and Dependable Multi-core Architectures at Na

Address Roma, Italy

26/02/2011 – 03/03/2011 Palmse, Estonia

WINTER SCHOOL 16th Estonian Winter School in Computer Science (EWSCS)

Address Palmse, Estonia

30/09/2008 – 31/01/2011 Cluj-Napoca, Romania

MSC Technical University of Cluj-Napoca, Automation and Computer Science Faculty, Automation Department

Address Cluj-Napoca, Romania

30/09/2008 – 31/01/2011 Cluj-Napoca, Romania

PHD, SYSTEMS ENGINEERING Technical University of Cluj-Napoca, Automation and Computer Science Faculty, Automation Department

Self-Healing Capabilities in Digital Systems

Address Cluj-Napoca, Romania

28/02/2010 – 30/07/2010 Barcelona, Spain

EXTERNAL MOBILITY STAGE WITHIN THE PHD STUDIES TO UNIVERSITAT POLITÈCNICA DE CATALUNYA Politècnica de Catalunya, Department of Electronic Engineering

Address Barcelona, Spain

30/09/2003 – 30/06/2008 Cluj-Napoca, Romania

BSC IN SYSTEMS AND COMPUTER ENGINEERING, AUTOMATION Technical University of Cluj-Napoca, Automation and Computer Science Faculty, Automation Department

Address Cluj-Napoca, Romania

● **DIGITAL SKILLS**

FPGA - VHDL | C | Python | microcontrollers | Proficient User of Latex | Debian Linux | Single-board computers (Raspberry Pi) | Wi-Fi | Bluetooth Low Energy

● **ADDITIONAL INFORMATION**

PUBLICATIONS

Digital Design Laboratory using LabVIEW – 2020

Mediamira, Cluj-Napoca, ISBN 978-973-713-353-3

G. Moiş, H. Hedeşiu, S. Folea

[Power quality measurement system using FPGAs](#) – 2012

DOI: 10.1109/OPTIM.2012.6231855

Folea, S., Mois, G., Miclea, L.

[Multi-purpose sensor platform development](#) – 2012

DOI: 10.1109/AQTR.2012.6237729

Folea, S., Neagu, M., Mois, G., Miclea, L.

[Battery lifetime testing using LabVIEW™](#) – 2012

DOI: 10.1109/REV.2012.6293122

Folea, S., Mois, G., Miclea, L., Ursutiu, D.

[WI-FI portable solution for distributed radon measurements](#) – 2013

Folea, S., Hulea, M., Moiş, G., Cosma, V.

[Wi-sensors: A low power Wi-Fi solution for temperature and humidity measurement](#) – 2013

DOI: 10.1109/IECON.2013.6699777

Hulea, M., Mois, G., Folea, S., Miclea, L., Biscu, V.

[A cloud-based cyber-physical system for environmental monitoring](#) – 2014

DOI: [10.1109/MECO.2014.6862654](https://doi.org/10.1109/MECO.2014.6862654)

Sanislav, T., Mois, G., Folea, S., Miclea, L., Gambardella, G., Prinetto, P.

[Data logger for humidity and temperature measurement based on a programmable SoC](#) – 2014

DOI: 10.1109/AQTR.2014.6857877

Folea, S., Mois, G., Hulea, M., Miclea, L., Biscu, V.

[A low-power wireless sensor for online ambient monitoring](#) – 2015

DOI: 10.1109/JSEN.2014.2351420

Folea, S.C., Mois, G.

[**Communication in Cyber-Physical Systems**](#) – 2015

DOI: 10.1109/ICSTCC.2015.7321310

Mois, G., Folea, S., Sanislav, T., Miclea, L.

[**Integrating wireless sensor networks and cyber-physical systems: Challenges and opportunities**](#) – 2016

6

DOI: 10.1049/PBCE096E_ch3

Sanislav, T., Mois, G.D., Folea, S., Miclea, L.

[**A Cyber-Physical System for Environmental Monitoring**](#) – 2016

DOI: 10.1109/TIM.2016.2526669

Mois, G., Sanislav, T., Folea, S.C.

[**A low-power PSoC-based environmental monitoring system**](#) – 2016

DOI: 10.1109/AQTR.2016.7501295

Mois, G., Folea, S., Sanislav, T., Miclea, L.

[**A Cloud-Integrated, Multilayered, Agent-Based Cyber-Physical System Architecture**](#) – 2017

DOI: 10.1109/MC.2017.113

Sanislav, T., Zeadally, S., Mois, G.D.

[**Analysis of Three IoT-Based Wireless Sensors for Environmental Monitoring**](#) – 2017

DOI: 10.1109/TIM.2017.2677619

Mois, G., Folea, S., Sanislav, T.

[**An HTTP-based environmental monitoring system using power harvesting**](#) – 2017

DOI: 10.1109/ICSTCC.2017.8107142

Mois, G., Szilagyi, Z., Sanislav, T., Folea, S.

[**Performance evaluation of energy-autonomous sensors using power-harvesting beacons for environmenta**](#)

– 2018

DOI: 10.3390/s18061709

Dan Mois, G., Sanislav, T., Folea, S.C., Zeadally, S.

[**Wireless energy harvesting: Empirical results and practical considerations for Internet of Things**](#) – 2018

8

DOI: 10.1016/j.jnca.2018.08.002

Sanislav, T., Zeadally, S., Mois, G.D., Folea, S.C.

[**Self-Adaptation Techniques in Cyber-Physical Systems \(CPSs\)**](#)

DOI: 10.1109/ACCESS.2019.2956124

Zeadally, S., Sanislav, T., Mois, G.D.

[**Lessons Learned from the Development of Wireless Environmental Sensors**](#) – 2020

DOI: 10.1109/TIM.2019.2938137

Folea, S.C., Mois, G.D.

[**Energy Harvesting Techniques for Internet of Things \(IoT\)**](#) – 2021

DOI: 10.1109/ACCESS.2021.3064066

Sanislav, T., Mois, G.D., Zeadally, S., Folea, S.C.

NETWORKS AND MEMBERSHIPS

Memberships

- IEEE Member since 2009, Senior member since 2021
- IEEE Young Professionals Member since 2014
- IEEE IMS Member since 2016
- HiPEAC Member since 2018

PROJECTS

Projects as lecturer at TUCN

- 1 with national funding, as principal investigator
 - uSD-BLE EDL – Thermal Printer, Bluetooth Low Energy and microSD Data Logger - Contract No. 65CI/2017, PN III (2017)
- 1 with internal university funding, as principal investigator
 - PHEWS – Evaluation of Power Harvesting Elements in Wireless Sensors, Contract No.1998/2017, CICDI (2017-2018)
- 5 with national and international funding, as a member of the implementation team
 - "Power Harvesting Ambient Beacon for the IOT", Accenture grant, April-August 2016
 - "TETRACOM D3.44: Sub 1 GHz ISA100 technology for low cost and low power consumption embedded systems (ISA100)", Technology Transfer Project, January-June 2016
 - "SCADA Federation, Collaborative Instrument for Water Management – Somes River Pilot Application - F2S", PN-II-PARTNERSHIPS project (contract 2/2014)
 - "Designing Cloud-based Self-healing Cyber-Physical Systems – CyCloSe" (2013-2014), Romanian-Italian bilateral cooperation project (contract 642/2013)
 - "Development of Self-Healing Capabilities for Digital Societies – SODA" (2007-2009), PN-II-Ideas project (contract 93/2007)

JOB-RELATED SKILLS

Job-related skills

The participation in the entire process of development of measurement and control equipment. Writing firmware for:

- embedded systems based on SoC, PSoC, microcontrollers (Cypress, STMicroelectronics),
- embedded applications and automation systems,
- Linux-based systems,
- Wi-Fi and BLE applications.

Writing technical documentation for embedded systems. Writing scientific articles in the area of embedded systems.

OTHER SKILLS

Other skills

Advanced knowledge in:

- development of applications based on PSoC (M8C, 8051), FPGA,
- development of wireless systems based on Wi-Fi, Bluetooth low energy,
- development of applications running on single-board computers (RPI, BBB),
- interfaces and protocols - 1-Wire, UART, I2C, SPI, RS-232 and RS-485 standards,
- C, Python, VHDL, LabVIEW programming,
- LaTeX, CorelDRAW.

REVIEWER

Reviewer

IEEE Transactions on Instrumentation and Measurement, IEEE Sensors, Sensors, IEEE Access

PROGRAMME COMMITTEE

Programme Committee

AQTR'12, AQTR'14, AQTR'16, ANT2017, AQTR'18, AQTR'20

ORGANIZING COMMITTEE

Organizing Committee

ETS'14, AQTR'16

PATENTS

METHOD FOR DYNAMICALLY MODIFYING FREQUENCY IN AN ARITHMETIC UNIT BASED ON ONLINE ERROR DETECTION

OSIM PATENT NO. RO130282-B1 / 30.03.2018