



**Researcher – lecturer Ph.D. Nicoleta Cristina GAITAN**, was born in 1980. She received the Ph.D. in Computer and Information Technology at the "Stefan cel Mare" University of Suceava (Romania) in 2010, M.S. in Computer Engineering (2008) and B.S. in Computer Engineering (2004) at the "Stefan cel Mare" University of Suceava. She has over 20 years of experience in both the academic field and in the private sector being involved in over 12 research and development projects of which 2 project acted as principal investigator. In the private sector, she performed applied research in industrial designing and implementing hardware/software in microcontroller-based applications, software distributed real-time systems, FPGA systems, local industrial networks, and applications to monitor and control industrial processes. Her

teaching activity began in 2008, and from 2014 holds the position of lecturer in the Department of Computer from the University "Stefan cel Mare" Suceava (Course & Labs for Microcontroller, Local Industrial Networks (Fieldbuses), Communications Protocol, Architecture of the Computer Systems). The research results includes a total of 43 scientific papers, of which 17 papers published in journals with Impact Factor in ISI Web of Knowledge and 11 papers presented at various conferences indexed in ISI Web of Knowledge, five books, and projects. The total number of citations is 155 (127 without self-citations) in ISI Web of Science and 364 in Google Scholar, with h-index 7 in ISI Web of Science and 11 in Google Scholar. Since 2015, she is a Scientific Researcher in the Integrated Centre for research, development and innovation in Advanced Materials, Nanotechnologies, and Distributed Systems for fabrication and control (MANSiD) of "Stefan cel Mare" University of Suceava. In 2018, she finalized with successful (receiving the best qualification) the project, "Experimental demonstration device for validating and testing real time nMPRA microcontroller using MIPS32 architecture" (2017-2018) organized by the UEFISCDI. Selection of the most 10 important publications, books and research projects are:

1. **Gaitan, Nicoleta Cristina**; Ungurean, Ioan. 2021. "BACnet Application Layer over Bluetooth—Implementation and Validation". *Sensors* 2021, 21(2), 538. **Impact Factor: 3.275. SRI: 1.256.**
2. Ioan Ungurean and **Nicoleta Cristina Gaitan**. "A Software Architecture for the Industrial Internet of Things—A Conceptual Model." *Sensors* 20.19 (2020): 5603. **Impact Factor: 3.275. SRI: 1.256.**
3. **N. C. GAITAN**. "Enhanced Interrupt Response Time in the nMPRA based on Embedded Real Time Microcontrollers", *Advances in Electrical and Computer Engineering*, vol. 17, no. 3, pp. 77-84, 2017. **Impact Factor: 0.595.**
4. Ioan Ungurean, Nicoleta Cristina Gaitan and Vasile Gheorghita Gaitan, "A Middleware Based Architecture for the Industrial Internet of Things", *KSII Transactions on Internet and Information Systems*, vol. 10, no. 7, pp. 2874-2891, 2016. **Impact Factor: 0.365, SRI: 0.2.**
5. Vasile Gheorghita Gaitan, **Nicoleta Cristina Gaitan**, Ioan Ungurean. "CPU Architecture Based on a Hardware Scheduler and Independent Pipeline Registers," *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, vol.23, no.9, pp.1661-1674, Sept.2015. **Impact Factor 1.142, SRI: 1.426.**
6. Vasile Gheorghita Gaitan, **Nicoleta Cristina Gaitan**, Ioan Ungurean, "A flexible acquisition cycle for incompletely defined fieldbus protocols," *ISA transactions*, vol. 53, no. 3, pp. 776-786, May 2014. **Impact Factor: 2.256, SRI: 1.366.**
7. Nicoleta-Cristina GĂITAN, "ARHITECTURA SISTEMELOR DE CALCUL – aplicații teoretice și practice", editura MATRIX ROM, Bucuresti, Romania, 2019, ISBN 978-606-25-0483-0.
8. Nicoleta-Cristina GĂITAN, "Contribuții privind dezvoltarea arhitecturală a sistemelor distribuite de timp real", editura MATRIX ROM, Bucuresti, Romania, 2018.
9. PNCDI III, Experimental - Demonstration Projects PED-2016, "Experimental demonstration device for validating and testing real time nMPRA microcontroller using MIPS32 architecture", Contract no. 220PED/17.08.2017, 2017-2018, **principal investigator**, <http://www.mips32-220ped.usv.ro/>
10. POS. CCE – Making a language converter allowing integration equipment produced by main manufacturers of automation in solutions of "intelligent building" and "sustainable building", financed by the European Union Operational Program Increase of Economic Competitiveness, contract no. 322/6.07.2011 (2011-2013), **principal investigator**.