

Curriculum Vitae

Personal information

First name(s) / Surname(s) Radu Adrian MUNTEANU
 Telephone(s) 0264-401434
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 E-mail radu.a.munteanu@ethm.utcluj.ro
 Nationality Romanian
 Date of birth 13.03.1975

Work experience

Dates 02.2000 - present
 Name and address of employer Department of Electrotechnics and Measurements, Faculty of Electrical Engineering, Technical University of Cluj-Napoca, 28 Memorandumului Str., 400114, Cluj-Napoca, România
 Occupation or position held Junior Assistant (2000), Assistant (2002), Lecturer (2005), Associate Professor (2007), Professor (2016)
 Main activities and responsibilities Teaching and research activity

Education and training

Dates 29.09.2015
 Title of qualification awarded Habilitation Thesis in Electrical Engineering
 Principal subjects/occupational skills Title of Habilitation Thesis: Engineering applications in the field of measurement signal processing, reliability analysis, and process measurements and control
 Name and type of organization providing education and training Technical University of Cluj-Napoca, 28. Memorandumului str., 400114, Cluj-Napoca
 Dates 10.1999 – 08.2006
 Title of qualification awarded PhD in Electrical Engineering
 Principal subjects/occupational skills Title of Doctoral Thesis: "Contributions to the development of synchronous detection techniques and applications"
 Name and type of organization providing education and training Technical University of Cluj-Napoca, 28. Memorandumului str., 400114, Cluj-Napoca
 Dates 10.1999-06.2000
 Title of qualification awarded Master/Advanced Studies
 Principal subjects/occupational skills Metrology and Instrumentation
 Name and type of organization providing education and training Technical University of Cluj-Napoca, 28. Memorandumului str., 400114, Cluj-Napoca
 Dates 10.1998-06.1999
 Title of qualification awarded Master/Advanced Studies
 Principal subjects/occupational skills Sociopsychopedagogy/Social Communication
 Name and type of organization providing education and training Faculty of History and Philosophy, Babeş-Bolyai University Cluj-Napoca, 7-9 Universităţii str., 400084 Cluj-Napoca
 Dates 10.1994-06.1999

Title of qualification awarded Electrical Engineer
Principal subjects/occupational skills General Electrical Engineering
Name and type of organization providing education and training Technical University of Cluj-Napoca, 28. Memorandumului str., 400114, Cluj-Napoca
Dates 10.1994-06.1998
Title of qualification awarded Bachelor's degree in Sociology
Principal subjects/occupational skills Sociopsychopedagogy/Sociology
Name and type of organization providing education and training Faculty of History and Philosophy, Babeş-Bolyai University Cluj-Napoca, 7-9 Universităţii str., 400084 Cluj-Napoca

Personal skills and competences

Mother tongue(s) Romanian

Other language(s)

Self-assessment

European level (*)

English

French

Italian

German

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
C2	C2	C2	C2	C2
C2	C2	C2	C2	C2
C1	C1	C1	B2	B1
B1	A2	B2	B1	A2

Didactic activity

Teaching Courses Electrical and Electronic Measurements

Quality and Reliability

Electronic Instrumentation

Reliability of Medical Equipment

Quality Management in Medical Engineering

Data Acquisition Systems

Home Automation and Building Management Systems

Training Mobility

National Technical University of Athens, Greece, 2000

Tampere International Center for Signal Processing, Tampere University of Technology, Finland, 2001

Delft University of Technology, Delft, The Netherlands, 2002

Institut fuer Werkzeugmaschinen der Universitaet Stuttgart, Germany, 2004, 2006

Ajou University, Suwon, Republic of Korea, 2005

Vrije Universiteit Brussel, Belgium, 2006

University of Szeged, Hungary, 2008

European Patent Office, Haga, The Netherlands, 2008

National University of Singapore, Singapore, 2009

HAMK University, Finland, 2011

Ecole Polytechnique Federale de Lausanne, Switzerland, 2016

Technical University of Moldova, Chişinău, Republic of Moldova, 2019

University of West Attica, Department of Electrical and Electronics Engineering, Athens, Greece, 2019

Slovak University of Technology in Bratislava, Slovakia, 2020, 2022

- Institutional Projects (max 5 the most representative)
1. Transnational partnership for the development of pre-university technical education by applying the German system of "projects for practical work" in school workshops in Romania, Project POSDRU/87/1.3/S/64234, 01.10.2010-28.02.2013. Project Manager
 2. Facilitating access to the labor market through internships for students, Project POSDRU/22/2.1/G/22008, 01.10.2010-30.09.2012. Project Manager
 3. Developing entrepreneurial and managerial skills in the area of innovative SMEs in Romania for the formation and promotion of national and transnational partnerships, Project POSDRU/92/3.1/S/63922, 01.11.2010-30.10.2013.
 4. Interuniversity Partnership for Excellence in Engineering – PARTING, project POSDRU/159/1.5/S/137516 2014-2015.
 5. Strategic framework for the adoption and use of innovative technologies in public administration 2021-2027 – solutions for streamlining activity, project SIPOCA 704/ cod SMIS: 129878.

Research

- National Grants (max 5 the most representative)
1. Supporting the integration of Romanian research in the field of electromagnetic pollution into European networks, programs and partnerships in the field. Funding: State Budget - Ministry of Education and Research, "Research of Excellence" Program, National Authority for Scientific Research. CEEX Project - MODULE III, Title Contractor: "Gh. Asachi" Technical University of Iași. Associate Contractor - Partner P2: Technical University of Cluj-Napoca, 2006-2008. Collectively responsible.
 2. Development of applied techniques for discrete-time synchronous detection for measuring electrical circuit parameters, Contract AT CNCIS 2007, contract director
 3. Modular complex automation system with remote dispatching for controlling the technological flow of wheat and/or corn mills - AUTMPG, Financing Contract no. 1250/2007, PN II Innovation: Associate Contractor - Partner P2: Technical University of Cluj-Napoca, 2007-2009. Project Manager
 4. Automatic system with configurable and modular real-time control for obtaining combined feeding for goats, Financing Contract no. 11/ 19.09.2007, PN II Innovation: Associate Contractor - Partner P2: Technical University of Cluj-Napoca, 2007-2009. Project Manager
 5. Blueprint for Net-Zero Apartment-block Neighborhoods, Horizon 2020 Grant agreement ID: 101036519, 2023-2025, member
- International Grants (max 5 the most representative)
1. Fostering the implementation of shallow geothermal hybrid heating and cooling systems in the Danube Region, Interreg Programme Danube Region, DRP0200244 -Danube GeoHeCo, 2024-2026, Project Manager
 2. Energy Transition Audits towards Decarbonization – EnTRAINER, LIFE Grant Agreement No 101076424, 2023-2025
 3. Research contract between the Technical University of Cluj-Napoca and MultiPRO vof (Netherlands), with the aim of research activities in the field of sensor technology and development of algorithms in the field of signal processing, 2005 – 2006, member
 4. Development of new numerical analysis techniques and their implementation in a software package for 3D optimization of electromagnetic and electrochemical devices – DESIGN, BWS04/03. Bilateral research contract with Flanders, partner Vrije Universiteit Brussel, Belgium, 2005-2007
- Scientific publications
- 12 co-authored books/chapters/guides published with ISBN
 Over 180 scientific papers published
 Editor 1 ISI-listed journal, 1 BDI journal / Reviewer 5 ISI-listed journals, 2 BDI journals, over 15 international conferences / Chairman-Member of the Scientific Committee 13
 9 awarded patents

Additional information

Awards GHEORGHE CARTIANU Prize of the Romanian Academy in the field of Science and Information Technology, 2010 (awarded in 2012).

"Professor Bologna" distinction from the National Alliance of Student Organizations of Romania (ANOSR), 2012.

Diploma of Excellence of the Academy of Technical Sciences of Romania, 2015.

Diploma of Merit of the Ministry of Research and Innovation, 2019.

Badge of Honor of the Technical University of Moldova (patent no. 136), Republic of Moldova, 2015

Diploma of Excellence of the Technical University of Moldova, 2019.

3 awards from the National Authority for Scientific Research (ANCS), 2010.

Diploma of Excellence of the Technical University of Cluj-Napoca, 2013.

Excellence Award of the Faculty of Electrical Engineering for young researchers, Technical University of Cluj-Napoca, 2006.

Over 180 distinctions, diplomas, gold and silver medals at international invention salons (Geneva, Brussels, Moscow, Zagreb, Budapest, Taipei, Seoul, Singapore, Warsaw, Nuremberg, Sevastopol, Chisinau, Bucharest, Iasi, Cluj-Napoca).

Editor's Choice Article, SENSORS (revisited ISI), September 2024

Membership of Professional Societies Member of AEHR Association for Hydrogen Energy of Romania

Member of the Romanian Robotics Society SRR

Member General Association of Engineers of Romania AGIR

Member Romanian Coalition for Engineering Education - CREDING

Other relevant activities UEFISCDI Evaluator for the program "PNRR - Endowments - 2023"

Expert of the Ministry of Research, Innovation and Digitalization – 2023

UEFISCDI Evaluator for the PED Experimental-Demonstrative Projects program - 2024

Significant books published in the last 10 years (max 10)

1. Radu A. Munteanu, Adrian Augustin Pop, Horia Bălan - *Electrical Measurement Techniques in Power Protection Systems: Laboratory Work*, Mediamira Publishing House, ISBN 978-973-713-316-8, 2014
2. Dan Iudean, Radu Munteanu jr., Mircea Buzdugan, Eudor Flueraș, Alex Crețu - *Electrical and Electronic Measurements: Laboratory Tutorial*, Mediamira Publishing House, ISBN 978-973-713-338-0, 2016
3. Rodica Holonec, Radu Adrian Munteanu, Romul Copîndean, Florin Drăgan - *Virtual Instrumentation. Laboratory work*, UTPRESS Publishing House, ISBN 978-606-737-340-0, 2018

**Significant papers published
in the last 10 years (max 10)**

1. Cheimaras, Vasileios; Papagiakoumos, Spyridon; Peladarinos; Nikolaos; Trigkas, Athanasios; Papageorgas, Panagiotis; Piromalis, Dimitrios D.; Munteanu, Radu A. - *Low-Cost, Open-Source, Experimental Setup Communication Platform for Emergencies, Based on SD-WAN Technology*, TELECOM, Volume5, Issue2, Page 347-368, DOI10.3390/telecom5020018. Published JUN 2024
2. Daousis, Spyridon; Peladarinos, Nikolaos; Cheimaras, Vasileios; Papageorgas, Panagiotis; Piromalis, Dimitrios D.; Munteanu, Radu Adrian - *Overview of Protocols and Standards for Wireless Sensor Networks in Critical Infrastructures*, FUTURE INTERNET, Volume16 Issue 1, DOI10.3390/fi16010033, Article Number 33. Published JAN 2024
3. Peladarinos, Nikolaos; Piromalis, Dimitrios; Cheimaras, Vasileios; Tserepas, Efthymios; Munteanu, Radu Adrian; Papageorgas, Panagiotis - *Enhancing Smart Agriculture by Implementing Digital Twins: A Comprehensive Review*, SENSORS, Volume 23, Issue 16, DOI10.3390/s23167128, Article Number 7128. Published AUG 2023
4. Druta, Roxana-Maria; David, Geanina-Maria; Munteanu, Radu-Adrian; Birgovan, Loredana-Andreea; Cinci, Sorin-Dan - *WEEE Industry in the Context of Circular Economy*, ACTA TECHNICA NAPOCENSIS SERIES-APPLIED MATHEMATICS MECHANICS AND ENGINEERING, Volume 64, Issue 4, Page 689-696, Special Issue SI. Published DEC 2021
5. Ovidiu-Catalin, Blidar; Munteanu, Radu A.; Leon, Brai; Iudean, Dan; Alexandru, Risteiu; Paul, Popa - *Modeling and Simulation of a Compensation PCB for Oscilloscope Probes*, 2021 16TH INTERNATIONAL CONFERENCE ON ENGINEERING OF MODERN ELECTRIC SYSTEMS (EMES), Page 21-24, DOI 10.1109/EMES52337.2021.9484115. Published 2021
6. Leon, Brai; Mihai, Bolchis; Ovidiu-Catalin, Blidar; Radu, Balan; Munteanu, Radu A. - *Active Filtering in Beamforming Circuit: Design, Calculation and Simulation*, 2021 16TH INTERNATIONAL CONFERENCE ON ENGINEERING OF MODERN ELECTRIC SYSTEMS (EMES), Page 29-32, DOI 10.1109/EMES52337.2021.9484135. Published 2021
7. Dulf, Evelin-H; (Berciu, Alexandru-G; Munteanu, Radu A.; Kovacs, Levente - *Advantages of Prefilters in Stroke Diagnosis from EEG Signals*, 2021 INTERNATIONAL CONFERENCE ON E-HEALTH AND BIOENGINEERING (EHB 2021), 9TH EDITION, DOI 10.1109/EHB52898.2021.9657718. Published 2021
8. Bolba, Marius; Munteanu, Radu A.; Iudean, Dan; Cretu, Alexandru - *Analysis of the wholesale energy market price in Romania and its impact on the end customer*, PROCEEDINGS OF 2019 8TH INTERNATIONAL CONFERENCE ON MODERN POWER SYSTEMS (MPS), DOI 10.1109/mps.2019.8759795. Published 2019
9. Balc, Claudiu; Cretu, Alexandru; Munteanu, Radu, Jr.; Iudean, Dan; Balan, Horia; Karaisas, Petros - *Reliability Modeling for an Automatic Level Control System* - 2017 INTERNATIONAL CONFERENCE ON OPTIMIZATION OF ELECTRICAL AND ELECTRONIC EQUIPMENT (OPTIM) & 2017 INTL AEGEAN CONFERENCE ON ELECTRICAL MACHINES AND POWER ELECTRONICS (ACEMP), Page 995-1000. Published 2017
10. Dorca, Vasile, Popescu, Sorin; Munteanu, Radu, Jr.; Chioreanu, Adrian; Peleskei, Claudius - *Agile Approach with Kanban in Information Security Risk Management*, PROCEEDING OF 2016 IEEE INTERNATIONAL CONFERENCE ON AUTOMATION, QUALITY AND TESTING, ROBOTICS (AQTR), Page19-24. Published 2016

Cluj-Napoca,
Date: September 2024

Name and signature: Radu Adrian MUNTEANU