



Emilia Şipoş



WORK EXPERIENCE

[2013 – Current] **Assistant professor**

Technical University of Cluj-Napoca

Main activities and responsibilities:

Teaching, research and administrative activities

[2004 – 2013] **Assistant lecturer**

Technical University of Cluj-Napoca

Main activities and responsibilities:

Teaching, research and administrative activities

[2001 – 2004] **Teaching assistant**

Technical University of Cluj-Napoca

Main activities and responsibilities:

Teaching, research and administrative activities

[2019 – Current] **Faculty responsible, Office for Relations with Industry and Student Internships - ORIPS**

Technical University of Cluj-Napoca

Main activities and responsibilities:

Organizing and monitoring internship programs for students, partnerships between faculty and companies, organizing internship evaluations

[2012 – Current] **Students' counselor, 2nd year, Bachelor**

Technical University of Cluj-Napoca

Main activities and responsibilities:

Student counseling activities

[2002 – Current] **Member of Admission Committee for Bachelor studies, Faculty of Electronics, Telecommunications and Information Technology**

Technical University of Cluj-Napoca

Main activities and responsibilities:

Planning and promoting, active implication in the admission process

EDUCATION AND TRAINING

[2012] **PhD in Electronic Engineering and Telecommunications**

Technical University of Cluj-Napoca <https://www.utcluj.ro/>

Address: 28 Memorandumului street, 400114

[2012] **Graduate of DidaTec program**

Technical University of Cluj-Napoca, project POSDRU/87/1.3/S/60981, 2010-2013

[2001] **Postgraduate studies in Complex electronic circuits design techniques**

Technical University of Cluj-Napoca

[2000] **Engineer in Communications**

Technical University of Cluj-Napoca

LANGUAGE SKILLS

Other language(s):

English

LISTENING B2 READING B2 WRITING B2

SPOKEN PRODUCTION B2 SPOKEN INTERACTION B2

French

LISTENING B1 READING B1 WRITING B1

SPOKEN PRODUCTION B1 SPOKEN INTERACTION B1

DIGITAL SKILLS

My Digital Skills

Microsoft Office - Advanced | Web Design & Web Development | MATLAB / MATLAB Simulink |
Electronic circuit simulation programs: OrCAD, PSpice

TEACHING ACTIVITIES

In charge of courses

Electronic Devices; Programs: Applied Electronics, Telecommunications Technologies and Systems,
1st year

Fundamental Electronic Circuits; Programs: Applied Electronics, Telecommunications Technologies
and Systems, 2nd year

Quality Management; Program: Economic Engineering in the Electric, Electronic and Energetic
Domain, 4th year

SCIENTIFIC ACTIVITIES

Research interests

- Applications of computational intelligence techniques in identifying fabrication defects
- Assistive technologies
- Applications of computational intelligence techniques in the analysis, modelling and design of electronic circuits
- Quality management
- Design and implementation of educational software
- Using ternary logic in the design of electronic circuits

PUBLICATIONS

38 scientific papers and 3 books, out of which the most representative are:

1. ȘIPOȘ, Emilia; CIUCIU, C.; IVANCIU, Laura, 2022. "Sensor-Based Prototype of a Smart Assistant for Visually Impaired People—Preliminary Results" *Sensors* 22, no. 11: 4271, <https://doi.org/10.3390/s22114271>
2. ȘIPOȘ, Emilia; ONEȘ, Alexandra; GROZA, R., Failure detection on PCBs: an image processing based approach. In: 2019 IEEE 25th International Symposium for Design and Technology in Electronic Packaging (SIITME). IEEE, 2019. p. 375-378.
3. ȘIPOȘ, Emilia; IVANCIU, Laura-Nicoleta, Failure Analysis and Prediction using Neural Networks in the Chip Manufacturing Process, 40th International Spring Seminar on Electronics Technology (ISSE), Sofia, BULGARIA, MAY 10-14, 2017.
4. ȘIPOȘ, Emilia; CICĂ, L, MIRON, C., Software Minimization of Ternary Functions Using Matlab, IEEE International Conference on Automation, Quality and Test Robotics, AQTR 2012, Cluj-Napoca, Romania, 24-27 May, pp. 284-289.
5. MIRON, C., ȘIPOȘ, Emilia, The CMOS differential stage with active load intuitively demonstrates the unequal split of the differential input voltage, IEEE Transactions on Education, ISSN 0018-9359, Volume 49, Issue 4, Nov. 2006, pp. 481 – 488.

RESEARCH GRANTS AND CONTRACTS

9 research contracts, out of which the most representative are:

- Artificial intelligence based automated testing system for complex electronic circuits (2019-2020), GNaC 2018 ARUT, Director
- Analysis of relationships between measuring frequencies and component deflection on PCBs (2020), external contract, Director
- Hybrid system for estimation and prevention of university dropout, using computational intelligence techniques (SPPA-TIC), internal competition CICDI 2017, Director Assist.prof. Laura-Nicoleta IVANCIU, Team member

INSTITUTIONAL GRANTS AND PROJECTS

3 institutional projects

1. Launched start for a successful career, POCU/90/6.13/6.14, 2018-2020, TUCN responsible
2. Advanced internship for a successful career in engineering, „PAVING your way into a digital future”, POCU/626/6/13/130354, Director Assist.prof. Veronica MAIER, 2020 - 2022, Target group and internships expert
3. Collaboration for students' internship (P3S), POSDRU/22/2.1/G/24450, 2009-2011, Director Prof. Marina ȚOPA, Long-term expert

https://www.bosch.ro/media/career/students/raport_analiz_proiect_start.pdf

Cluj-Napoca, 08/06/2022

