







PERSONAL INFORMATION

Ligia Dorina CREMENE



-  Cluj-Napoca, Romania
-  0040-264-401226 
-  [Ligia.Cremene@com.utcluj.ro](mailto:Ligia.Cremene@com.utcluj.ro)
-  <http://users.utcluj.ro/~cligia>
- 

Technical University of Cluj-Napoca, Faculty of Electronics, Telecommunications, and Information Technology, Communications Department  
 Adaptive Systems Interdisciplinary Research Laboratory, <http://asl.utcluj.ro/asl>

POSITION

**Associate Professor** (2014 - present)

**Teaching:** Microwaves (undergraduate), Neural Networks for Telecommunications (master), Cognitive Communications (master)

**Research:** Cognitive Communications (Dynamic Spectrum Access, Game Theory – strategic interactions, adaptation, optimization, and complexity management in communications systems, adaptive techniques for wireless communications systems), Adaptive Antennas, Radio Resource Management.

WORK EXPERIENCE

2010-2013

**Postdoctoral researcher**

Technical University of Cluj-Napoca

- *Game Theoretical Approach to Cognitive Radio Environments*

**Business or sector** Wireless Engineering Research

2006 - 2011

**Assistant professor**

Technical University of Cluj-Napoca

- Teaching and research

**Business or sector** Academia

EDUCATION AND TRAINING

2003-2009

**Ph.D. in Electronics and Telecommunications**

from the Technical University of Cluj-Napoca  
 with the distinction “*Cum Laude*”

Thesis title: *Adaptive Techniques for Wireless Communications*

Scientific advisor: Professor Aurel Vlaicu

2003-2004

**M.Sc. in Telecommunications Engineering** 9.5 / 10

Technical University of Cluj-Napoca, Faculty of Electronics and Telecommunications  
 Dissertation title: *Contribution to Broadband Wireless Networks Analysis: Applications, Technologies, Market Studies, Propagation Studies*

1998-2003

**B.Sc. in Telecommunications Engineering** 9.5 / 10

Technical University of Cluj-Napoca, Faculty of Electronics and Telecommunications

PERSONAL SKILLS

Mother tongue(s)

Romanian

UNDERSTANDING	SPEAKING	WRITING

Other language(s)	Listening	Reading	Spoken interaction	Spoken production	
English	Experienced	Experienced	Experienced	Experienced	Experienced
TUCN language certificate.					
French	Experienced	Experienced	Experienced	Experienced	Experienced
TUCN language certificate.					

**Publications** Over 50 scientific works among which 42 indexed scientific papers (7 ISI journal papers, 13 ISI proceedings papers, 6 book chapters (Springer), 16 IDB (9 journal papers + 7 conf. proc.), two books, one lab manual, an edited book.

<http://users.utcluj.ro/~cligia/publications/index.html>

Over 20 scientific and technical reports presented at national and international scientific events.  
1 patent (OSIM), 2 patents pending (OSIM).

**Projects** **Research projects and grants:**

**5 international projects**

1. Director, experiment CREW FP7 Open Call 3, „Game Theoretical Experiments on Interference Coordination in Cognitive Radio Environments”, Acronym of experiment: GAME-COG-NET, CREW - FP7 - GA No. 258301, 2014.
2. Co-director, grant John Templeton Foundation, „Towards a Conceptual Integration of Artificial Intelligence, Game Theory, and Decision Theory”, 21481, 2011-2012.
3. Member, Special Interest Group on ISM–Advanced, COST Action IC0905 TERRA, 2012-2014.
4. Member, project BROADWAN FP6 „Broadband Services for Everyone Over Fixed Wireless Access Networks” FP6-2002-IST-1, 2003-2006.
5. Member, project COST 280 „Propagation Impairment Mitigation for Millimeter Wave Radio Systems”, 2001-2005.

**7 national competition grants**

1. Director, grant CNCSIS PD 637/2010, "Integrated adaptation model for complexity management in wireless communications systems", 2010 - aug. 2012
2. Director, grant CNCSIS TD 519/2007 „Developing new adaptive strategies for broadband wireless systems”, 2007-2008
3. Director, TUCN project, CI 24311/2013, „Efficient use of resources in cognitive wireless networks”, 2013-2014
4. Member, grant TE 252/2010 " Distributed service composition and adaptation mechanisms based on multicriteria optimization algorithms", 2010-2013
5. Member, grant CNCSIS AT 220/2007 "Dynamic service adaptation platform for mobile computing"
6. Member, project CNCSIS – 928/2005 „Low-cost Broadband Wireless Access for residential users”,
7. Member, grant CEEX – “Satellite Access Point Integrated Hotspots for Remote Communities”, nr.6107/2005.

Postdoctoral researcher within „4D-POSTDOC – Dezvoltarea și susținerea de programe postdoctorale multidisciplinare în domenii tehnice prioritare ale strategiei naționale de cercetare - dezvoltare – inovare”, POSDRU/89/1.5/S/52603, 2010-2013.

**Reviewer for ISI journals**

IEEE Communications Letters,  
IET Communications, IET Networks,  
IETE Technical Review,  
PIER/JEMWA, Journal of Electromagnetic Waves and Applications,  
Transactions on Parallel and Distributed Systems,  
Transactions on Emerging Telecommunications Technologies.

- Collaborations** Centre for the Study of Complexity (CSC), Babes-Bolyai University Cluj-Napoca, Laboratoire d'Electronique, Antennes et Telecommunications (LEAT), Universite de Nice Sophia-Antipolis, France, WUN CogCom – Cognitive Communications Consortium, SensorLab, Jozef Stefan Institute, Ljubliana, Slovenia, Ghent University / iMinds Lab, Belgium.
- Invited speaker** 7th COST-TERRA meeting, Apr 2013, Thessaloniki, Greece, 8th COST-TERRA meeting, Nov 2013, Biel, Switzerland WCSIT 2014, Iasi, Romania, Workshop on Circuits, Systems, and Information Technology; on the topic „Game Theoretical Approach to Cognitive Radio Environments”.
- Honours and awards**
- 2013 – 3rd Prize at Best Presentation Awards COST IC095 TERRA Action, Thessaloniki, Game Theoretical Approach to Cognitive Radio Environments.
  - 2012 – Romanian Academy Award
  - 2012 – PROINVENT excellence diploma
  - 2008 – Invitation to CNCSIS 10 conference (of the National University Research Council) for significant results of the TD 519/2007 project „Development of new adaptive strategies in broadband wireless systems”
  - 2008 – 1st Prize at the Symposium for Students in Electronics and Telecommunications – SSET 2008 Cluj-Napoca, (student coordinator)
  - 2008 – NURC prize for recognition of scientific paper
  - 2006 – Ericsson Award for Excellence in Telecommunications.
- Trainings**
- 2013 CREW Training Days, FP7 Cognitive Radio Experimentation World, Brussels, Feb 2013  
2012 International Summer School on Cognitive Wireless Communications  
Highlight on Game Theory, July 10–13, 2012 – Paris, France, COST Action IC0902 organizer: Supélec.  
2011, 2012 Doctoral Summer School on Evolutionary Computing in Optimisation and Data Mining (ECODAM), Iasi, Romania, June, organizers: "Alexandru Ioan Cuza" University Faculty of Computer Science and Siemens.  
2011 Virtual Intensive Course on Wireless Communications, IEEE Communications Society  
2008 - 2012 Visiting researcher (short-term scientific missions) Laboratoire d'Electronique, Antennes et Telecommunications – Universite de Nice Sophia Antipolis / CNRS France  
2009 AUF course: „Gestion de la redaction et de la publication scientifique en ligne” – AUF Agence Universitaire de la Francophonie, Cluj-Napoca, TIC passport  
2008 Certified interpreter for the field of Electronics and Telecommunications (English - Romanian) from the Ministry of Culture and Cults of Romania.  
2006 Summer school – New trends in teaching sciences, IV-th ed, „Creativity development education”, Departamentul pentru Pregătirea Personalului Didactic, Universitatea Babeş-Bolyai, Cluj-Napoca  
2003 Eurotraining Course: „Design Techniques and Tools for Low-Power Digital Systems”
- Other academic activities**
- Organizer, Symposium for Students in Electronics and Telecommunications SSET (since 2005)
  - Organizer, international conference „Coping with Complexity” – COPCOM 2011, 2012.
  - Student counselling and evaluation
  - Organizer, Student scientific debate group NO CAT COMM
  - Supporting infrastructure for teaching and research labs.
- Memberships**
- IEEE – The Institute of Electrical and Electronics Engineers (New York) member no: 90299324 (since 2007), (IEEE ComSoc, IEEE Antennas and Propagation, IEEE Computational Intelligence, IEEE Education Society),
- EuMA – European Microwave Association, no. AM150 (since 2008), <http://www.eumwa.org>,
- WUN CogCOM – A Worldwide Universities Network Initiative - Cognitive Communications Consortium (since 2010), <http://www.wun-cogcom.org/members/TUCN.html>.

Cluj-Napoca  
May 2015

Ligia Cremene, Ph.D