

Expertiză Conf. dr. ing. Petre Anghelescu  
 în legătură cu domeniul **Securitatea informației și sisteme cu inteligență artificială**  
 aplicabil în cadrul programului de pregătire a doctoranzilor din domeniul  
 Inginerie electronică, telecomunicații și tehnologii informaționale

**A) Implicare în granturi / proiecte de cercetare câștigate prin competiție:**

(a) **Director:**

1. **“Cryptosystem based on chaotic dynamics implemented with cellular automata for protection of information on network systems”**, Postdoctoral research project, PD 369, Ministry of Education, Research and Innovation, Contract no. 10/02.08.2010 [http://uefiscdi.gov.ro/userfiles/file/PROIECTE%20PD%20COMPETITIA%202009/REZULTATE%20PD\\_DOMENIU%202\\_2.pdf](http://uefiscdi.gov.ro/userfiles/file/PROIECTE%20PD%20COMPETITIA%202009/REZULTATE%20PD_DOMENIU%202_2.pdf).
2. **“Encryption system based on the cellular automata theory for protection of information in network systems”**, Research project for scientific research creation youth candidates for a doctor's degree, TD 365, Ministry of Education and Research, Contract no. 35GR/23.05.2007 [http://uefiscdi.gov.ro/articole/1331/COMISIA\\_2\\_TD\\_NOI\\_FINANTATE.html](http://uefiscdi.gov.ro/articole/1331/COMISIA_2_TD_NOI_FINANTATE.html)

(b) **Responsabil de grant/proiect:**

1. **“Advanced protection of critical buildings by Overall anticipating System - ARGOS”**, EU FP7-SECURITY program, project Argos/FP7-SEC-2012-313217, project number 313217 (<http://www.argos-project.eu/>), 2013 – 2015 (member and responsible for the final phase of the project in Greece, Athens in November-December 2015).

(c) **Membru în colectivele de cercetare ale granturilor / proiectelor:**

1. **Creșterea capacității instituționale de cercetare bioeconomică pentru exploatarea inovatoare a resurselor vegetale autohtone, în vederea obținerii de produse horticole cu valoare adăugată ridicată** – BIOHORTINOV, Cod: PN-III-P1-1.2-PCCDI-2017-0332, Beneficiary: UPIT, Scientific domain: Bioeconomie, start year: 2018, (member)
2. **“Testing loudspeaker systems in manufacturing process on the cars”** financed by S.C. DPR. DRAEXLMAIER procese de producție România S.R.L, Test of speaker system regarding feasibility, quality and cost. Theoretical evaluation & documentation of concept Requespec (LH), project no. 6/21.01.2014 (member).
3. **“Sistem de criptare cu algoritmi paraleli de calcul – CRIPTALL”**, perioada de derulare: 01.10.2008 – 30.09.2011, MECT/PNII, Contract Nr. 82107/01.10.2008 (member).
4. **„Sistem informatic de proiectare, simulare, testare și configurare a sistemelor energetice inteligente de energie regenerabilă – SINERG”**, 01.10.2008 – 30.09.2011, Ministerul Educației, Cercetării și Inovării, Centrul National de Management Programe, Programul 4: “Parteneriate în domeniile prioritare”, Domeniul: D2 – Energie, Contract nr. 22140/25.09.2008 (member).
5. **„Complex system, with ngn support, in order to offer telecare at home for elders – TELEASIS”**, PNCDI-II, Contract no. 604-440/14.09.2007 (member).
6. **“Multimedia platform for complex medical teleservices implementation – TELMES”**, CEEX program, Contract no. 604/645 21.10.2005 (member).
7. **“Sistem de Măsură Accelerometric Avansat Pentru Investigari Atmosferice cu Sonde Planetare”**, program AEROSPATIAL, Contract nr.117/15.10.2004 (member).
8. **„ Principles of increasing and optimizing the output performances of solid-state lasers”**, Ministry of Education, Research and Innovation, Contract no. 05-D11-27, No. 1018/05-10-2005 (member).
9. **“Integrated system for mobile user - SIUM”**, CEEX, AMCSIT, Ministry of Education and Research, Contract No. 1021/07.10.2005 (member).
10. **“Devices with metastructures for advanced processing of the radio signals in mobile and satellite communications – METAPRO”**, Ministry of Education, Research and Innovation – CEEX program, Contract no. 58/2006 (member).
11. **“Sistem Interactiv pentru Monitorizarea și Optimizarea Traficului Rutier - OPTIMTRAF”**, CEEX 2007, Institutul de Cercetari pentru Inteligența Artificială, Project 1369, Contract no. 71114 (member).

12. “*Microsistem de secretizare cu automate celulare în transmisia digitală a datelor*”, Programul MATNANTECH, Ministry of Education, Research and Innovation, Contract No. C145(308)/30.10.2003, No. 5930/20.09.2004 (member).
13. “*Cronotahograf electronic digital pentru autovehicule de transport marfă și călători*”, PNCDI 8C1/2004, AMTRANS program, Ministry of Education and Research, Contract nr. 6810/15.10.2004, No. 3231/15.10.2004 (member).
14. “*Dezvoltarea de microsisteme electronice pentru aplicații fiscale*”, S.C. Trion Company S. R. L., Contract no. 93/21.11.2003, No.: 8333/21.11.2003 (member).

#### B) Lucrări reprezentative (selectie)

- ✓ **Petre Anghelescu**, Silviu Ionita, Emil Sofron, “*Encryption Technique with Programmable Cellular Automata (ETPCA)*”, Publisher: OLD CITY PUBLISHING INC, **Journal of Cellular Automata**, Volume: 5, Issue: 1-2, ISSN:1557-5969, pag. 79-105, 2010, ISI Impact Factor: 0.511, WOS:000271530800004 (<http://www.oldcitypublishing.com/JCA/JCAcontents/JCAv5n1-2contents.html>).
- ✓ **Petre Anghelescu**, Silviu Ionita, Vasile-Gabriel Iana, “*High-Speed PCA Encryption Algorithm using reconfigurable computing*”, **Journal Cybernetics and Systems** (Taylor & Francis), ISSN: 0196-9722, Volume 44, Issue 4, 2013, ISI Impact Factor: 1.197, DOI:10.1080/01969722.2013.783375, WOS:000320016100001 (<http://www.tandfonline.com/loi/ucbs20>).
- ✓ **Petre Anghelescu**, “*FPGA implementation of programmable cellular automata encryption algorithm for network communications*”, International **Journal of Computer Systems Science and Engineering** (CSSE), volume 31, number 5, ISSN: 0267-6192, september 2016, ISI Impact factor: 0.855, WOS:000393361100003 (<http://www.crlpublishing.co.uk/journal.asp?j=csse&s=Vol%2031%202016>).

#### C) Alte informații

- ✓ **Brevet de invenție**: „Sistem cu radio-releu translatore programabil pentru telecomenzi în IR”, cerere OSIM nr: 126719A0 din 28.10.2010.
- ✓ **Diploma de excelență** acordată la Salonul Internațional al Invențiilor, Pro Invent Cluj-Napoca ([http://proinvent.utcluj.ro/catalogoage/Pro\\_Invent\\_2013.pdf](http://proinvent.utcluj.ro/catalogoage/Pro_Invent_2013.pdf)), pentru brevetul de invenție cu numele: „Sistem cu radio-releu translatore programabil pentru telecomenzi în IR”, Cerere OSIM Nr: 126719A0, 19-22 martie 2013.
- ✓ **Recenzor la următoarele jurnale ISI**: *Information sciences; Transactions on Emerging Telecommunications Technologies; Journal of Computational Engineering; Journal of Entropy; Journal of Systems and Software; Transactions on Modeling and Computer Simulation, Journal of Nonlinear Dynamics and Chaos in Engineering Systems.*
- ✓ **Membru în comitete științifice și recenzor la următoarele conferințe**: *Conference on Telecommunications and Signal Processing (TSP); International Conference on Signal Processing and Integrated Networks; Conference on Electronic & Mechanical Engineering and Information Technology; ECAI - Electronics, Computers and Artificial Intelligence International Conference; International Conference for Internet Technology and Secured Transactions (ICITST), SPIN, ATC.*
- ✓ **Chief Editor la Journal of Electrical Engineering, Electronics, Control and Computer Science (JEECCS)** – <http://jeeccs.net/index.php/journal/about/editorialTeam>.
- ✓ **Expert evaluator proiecte cercetare** pentru *Czech Science Foundation* – 2012, 2014 și 2016.

Data: 28.01.2019

Conf. dr. ing. Petre Anghelescu