



Personal information **Morogan Maria Luciana**

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Phone number 0040 730 855 961

Nationality Romanian

Date of birth 10th of October 1980

Gender Female

Driving licence Issued at 26th of November 1997

Work experience

Dates Since 2010

Occupation or position held Senior Lecturer

Name and address of employer Faculty of Information systems and cyber security for defense and homeland security, Military Technical Academy "Ferdinand I", Bucharest

Type of business or sector Education

Dates 2012-2014

Occupation or position held Senior Lecturer

Name and address of employer Faculty of Economics and Political Science and the Faculty of Engineering Sciences, Lumina University, Bucharest, Romania

Type of business or sector Education

Dates 2010

Occupation or position held Lecturer

Name and address of employer "Spiru Haret" University, Faculty of Mathematics and Computer Science

Type of business or sector Education

Dates 2006-2010

Occupation or position held Assistant Professor

Type of business or sector "Spiru Haret" University, Faculty of Mathematics and Computer Science
Education

Dates 2004-2006

Occupation or position held Univ. Preparator

Name and address of employer "Spiru Haret" University, Faculty of Mathematics and Computer Science

Type of business or sector Education

Dates 2004-2005

Occupation or position held Univ. Preparator

Name and address of employer University of Bucharest, Faculty of Mathematics and Computer Science

Type of business or sector Education

Education and training

Dates 2006 - 2011

Title of qualification awarded **PhD in Computer Science**

Principal subjects/occupational skills covered Cryptography, Natural Computing and Bio-inspired Computation, Artificial Intelligence, Molecular Cryptography, Genetics, Neuro sciences and Infectious diseases
PhD Thesis: *A prion-based model of a neural-like system* (in English)
Advisor: Prof. dr. Adrian Atanasiu

Name and type of organisation providing education and training University of Bucharest, Doctoral School of Computer Science

Dates 2005-2006
 Title of qualification awarded Second year of Master
 Principal subjects/occupational skills covered Theoretical Computer Science
 Name and type of organisation providing education and training University of Bucharest, Faculty of Mathematics and Computer Science

Dates 2004-2005
 Title of qualification awarded First year of Master
 Principal subjects/occupational skills covered Computer Science
 Name and type of organisation providing education and training Center of Mathématiques and Computer Science at Université de Provence Aix-Marseille I, Marseille, France

Dates 1999-2004
 Title of qualification awarded Bachelor of Computer Science in Mathematics and Computer Science
 Principal subjects/occupational skills covered Mathematics and Computer Science
 Name and type of organisation providing education and training University of Bucharest, Faculty of Mathematics and Computer Science

Dates 1996-1999
 Title of qualification awarded High school diploma
 Principal subjects/occupational skills covered Mathematics – Physics

Personal skills and competences

Mother tongue(s) Romanian

Other language(s) (1) English, (2) French, (3) Spanish and (4) Italian

Self-assessment

		Understanding				Speaking				Writing	
		Listening		Reading		Spoken interaction		Spoken production			
Language	1	1	excellent	1	excellent	1	excellent	1	excellent	1	excellent
Language	2	2	excellent	2	excellent	2	excellent	2	excellent	2	excellent
Language	2	3	good	3	good	3	fair	3	fair	3	fair
Language	2	4	good	4	good	4	fair	4	fair	4	fair

Technical/ Computer skills and competences
Programming: C/C++, Prolog, Assembly, Java, PHP/MySQL, HTML, SQL
Software: Integrated development environment (IDE): Microsoft Visual Studio C++, Python
Artificial intelligence: Weka, Prolog, GraphLab Create, Turi Create
Images: Blender
Office Automation: Microsoft Office

Artistic skills and competences Ballroom dance, sportive dance

Additional Information

Short description

My studies and my experience of almost 15 years (both in the contexts of information technologies and artificial intelligence), my capabilities of learning and innovating, as well as creativity, represent some of my qualities. One proof starts with my PhD thesis as a result of my research and innovation (I designed a new hybrid model of a neural bio-inspired self-evolutionary control system). The high potential capabilities reside in my potential of combining different areas of interest: cryptography and cyber-defence, different fields of AI and natural computing, mathematical modelling, neural sciences.

My expertise as a member of different organizing committees or as a jury of different international conferences, allowed me to acquire public speaking and communication skills, good decision making, thinking and techniques as well as a strong analytical spirit. Collateral proof: my collaboration with international figures of the Academia world (sustaining this, an example can be found in my collaboration with PhD Professor Ajith Abraham, Director of Machine Intelligence Research Labs, Washington, USA) or the invitation as an international specialist in the framework of the BIOM project IT4Innovation, Ostrava, Czech Republic.

My applied research experience and project management skills find their core in the collaboration on a series of research projects with the industry on software development in the field of data security solutions or artificial intelligence. My domains of interest: (1) Information security, Cryptography and cyber defense, (2) Artificial Intelligence, Molecular Cryptography, Natural Computing and Bio-inspired Computation, Computational Biology (3) Embedded systems, (4) Military information systems. I am also a member of the team of cyber security research.

My work at the Military Technical Academy (MTA) made me a good human profiler and an excellent problem-solving asset. My actual position is of a senior lecturer in the Faculty of Information systems and cyber security for defence and homeland security, both as a member and a council member of the Department of Computers and Cyber Security.

Scientific skills (Domains of interest)

- (1) Artificial Intelligence, Machine Learning, Bioinformatics, Computational Biology, Natural Computing and Bio-inspired Computation, Molecular Cryptography;
- (2) Information security, Cryptography and Cyber defence

Scientific research

• Applied research (grants):

- (1) **CovShield - SOL-2020-2 9. Dezvoltarea de tehnologii și sisteme de diagnostic local și la distanță eficiente al infectării cu virusul SARS-CoV-2. Project director.** No of contract: 25Sol/2020 from 01/07/2020. Project cod: PN-III-P2-2.1-SOL-2020-2-0360. Project coordinator: MILITARY TECHNICAL ACADEMY "FERDINAND I. Starting date: 01/07/2020. Finish date: 30/10/2020. Partners: Spitalul Universita de Urgenta Elias, Terrasigna. Financed by UEFISCDI – PN-III-P2-2.1-SOL-2020. Value of the contract: 543.750,00 RON, link project presentation site: <https://mta.ro/scutcov/> or <https://www.brainmap.ro/sp-7-pn-iii-p2-2-1-sol-2020-2-0360?&wtok=c8d7f5d070a98c1aeaedd0a719733206fb86b63e&wtkps=hZBLbsMgElbwj4ub2K86QmqSD0B5IFRY6DGrtNEvnuxW2XRTVfD/Prm0zBKcnkvkqhQvAFdkQxLQG6rcfNb75OarA38+kHDJxzbfnMwN41jzmi01fJwzWcEFz7TMQ+S6sl/2hQtey12p5n0Kka3190fDQP2ssz46ibtqoCYzJ8fL6hCkhLT4LiA4fIOBPwg705V+wcus8hLK/Sd1HU4cRYkQTDHDAorWaa205QYSR/iv2qs9vlQvMyzBNuMysem2OKX6PNkzb09TxNXvrg9WVKzoc6sn0D&wchk=7a2bb89179c66a8f6cb11f454f73e52ec606d0de>;
- (2) **Information extraction system for the Romanian language guarding the data confidentiality (PPIE – 2016-2018). Project director.** Contract no: 225PED din 05/09/2017. Project cod: PN-III-P2-2.1-PED-2016-1799. Project coordinator: MILITARY TECHNICAL ACADEMY "FERDINAND I. Starting date: 05/09/2017. Finishing date: 17/12/2018. Project realized with the support of Dcnews. Partner: CertSign. Financed by UEFISCDI – PNIII, Program Proiect Experimental Demonstrativ (PED) 2016. Value of the contract: 627.928,00 RON, link site: <https://ppie.certsign.ro/>
- (3) Persistent Scatters Time-Series Analysis and Post-processing Tool with Application to Infrastructure Threat Detection (PSTool – 2017) – member (see the list of Publications);
- (4) Key word spotting for real time surveillance in telephone conversations in Romania (Heimdallr – 2017-2018) – member (see the list of Publications);
- (5) Cloud cryptographic mechanisms under the exclusive control of the user (MC3Ex - 2016-2017) - member (see the list of Publications);
- (6) Advanced models for the design and evaluation of modern cryptographic systems (ADECS 2011-2015) – member (see the list of Publications);
- (7) Innovative service for infrastructure monitoring at national level (S14Ro), contract no. 64PTE / 2020. Implementation period: October 2021 - February 2022, ATMFI – partner (see the list of Publications);
- (8) MASSA - ADVANCED SECURITY MECHANISMS FOR AUTONOMOUS SYSTEMS (MASS), project code PN-III-P2-2.1-PTE-2019-0817, contract 56PTE / 2020, total value: 1,681,655.00, ATMFI value 327,002, 00 RON, project period, 2020 - 2022
- (9) LTPS - Electronic Service for the long-term preservation and guarantee of electronic signatures (LTPS), SMIS project code 2014: 123423, COMPETITIVENESS OPERATIONAL PROGRAM, Research, Technological Development and Innovation (CDI) axis in support of economic competitiveness, and business development", total value RON 6,170,317, ATMFI value RON 1,294,987, period July 2020 - July 2022

- **Invited specialist** in the framework of the IT4Innovations project (at the Faculty of Electrical Engineering and Computer Science, VSB-Technical University of Ostrava, in Czech Republic, visit sustained in the framework of the BIOM project, reg. no. CZ.1.07/2.3.00/20.0073 co-financed by ESF and Czech state budget)
- **Publication of two books:** "Graphs Algorithmics", S. Barza, L. M. Morogan, 2008 and "Data Structures", S. Barza, L. M. Morogan, 2007
- **Publications in international journals like:** PROCEEDINGS OF THE ROMANIAN ACADEMY Series A: Mathematics, Physics, Technical Sciences, Information Science (2015), International Journal of New Computer Architectures and their Applications (2011), Military Technical Academy Review (2011), International Journal of Computer Information Systems and Industrial Management Applications (2011)
- **Publications in international conference proceedings** (A+, ISI or other indexed proc.): NeurIPS2021, ECAI (2021), GLOBECOM 2020, ECAI (2018), RCD2015 (Bucharest), COMM2014, 2016, 2020 (3 papers) (Bucharest), SECIT2014,2015 (Bucharest), ISDA 2012 (Kochi, India), ICDIPC2011 (Ostrava, Czech Rep.), CISIM 2010 (Krakow, Poland), DSC2010 (Thessaloniki, Greece)

Academic activity

- Member of the Scientific Council of the Faculty of Information Systems and Cyber Security, ATMFI, Bucharest, Romania (since 2021)
- Member of the Council of the Computers and Cyber Security Department, Military Technical Academy, Bucharest, Romania (2020);
- Member of different board of education finals in bachelor's and MD degree programs (2013, 2014, 2015, 2016, 2020);
- Member of the re-accreditation board of the MD of security of information technology program (2016);
- Member of the EUA accreditation board (2013)
- Member of the Organizing Committee of the International Conference on Security for Information Technology and Communications (SECITC 11,12,13,14,15,16 (and Chair), 17,18,19,20);
- Member of the program committee of Workshop SECITC 2019;
- Peer reviewer for international conferences;
- Responsible for Erasmus agreements with the Technical University of Ostrava (Czech Rep.), or ENSEEIHT (Toulouse, France);
- Applied research:
 - Scientific research reports, installations and devices in the internal research plan: "eLearning system for the E2 department" (2013-2014)
- Responsible for the maintenance of the Blackboard E-learning platform (2010, Spiru Haret University)

Other activities students related

- More than 2500 hours of lectures, tutorials and practicals in bachelor computer science and Master of security of information technology. Topics: (1) Cryptography, Artificial Intelligence, Computers architecture, Bases of Informatics, Applied Informatics while working in the Military Technical Academy "Ferdinand I"; (2) lectures, tutorials and practicals in bachelor computer science: Cryptography, Computer architecture, Algorithms of graphs, Data Structures, Programming C while in the Spiru Haret University and (3) Artificial Intelligence, Bioinformatics, Digital Integrated Circuits, Architecture logic of computers, Databases, Tools of the Internet while in Lumina University;
- Head of Cryptography course in Master;
- Attracting students to various research topics completed with articles presented at scientific events (2013-2021)
- Student implication in research grants (2016-2021);
- Supervision of projects of end of studies (Master and Bachelor's degree) and the placement and training of a foreign Erasmus student (l'Ecole Polytechnique de l'Université de Nantes, France, 2014);
- Study guide for groups of students;
- Responsible for the organization of the International scientific symposium of students CERC 2013 or member of CERC 2015, 2016, 2021;
- Elaboration of didactic materials:
 - Adaptation of existing courses as a result of changes in curricula: Artificial Intelligence course (2013-2021), Applied Informatics (2019-2021)
 - Introduction of new topics: Artificial Intelligence course and Basics of Computer Science (2013-2020), Applied Informatics (2019-2021)
 - Laboratory study support:
 - laboratory platforms for the development of specific Machine Learning applications and the development of applications for the GraphLab Create and Sframe platform using Python; laboratory platforms for the development of applications based on Windows scripts (2013-2016)
 - laboratory platforms for the development of specific Machine Learning applications and the development of applications for the Turi Create and Sframe platform using Python3 (under Microsoft WSL); laboratory platforms for Cryptography at MD level (2019-2021)
 - Use of specialized computer programs in the teaching process for Machine Learning (2010-2021)

Other activities

- Member as a technology expert of the Project selected under the Operational Program Administrative Capacity co-financed by the European Union, from the European Social Fund, Priority Axis 1: Effective public administration and judiciary, Specific objective 1.1: Development and introduction of common systems and standards in public administration optimizing decision-making processes aimed at citizens and the business environment, in line with SCAP, Project title: "Strategic framework for the adoption and use of innovative technologies in public administration 2021-2027 - solutions for business efficiency", CODE: SIPOCA 704, Beneficiary: AUTHORITY FOR THE DIGITALIZATION OF ROMANIA, Partner: TECHNICAL UNIVERSITY OF CLUJ - NAPOCA (2021-2022);
- Member of the development team of a leaderboard for NLP in Romanian language, together with research members and colleagues from AIRomania and ARIA (<https://lirobenchmark.github.io/>);
- Member of the scientific community AIRomania (<https://www.airomania.eu/>)
- A DeepLearning.AI community meetup on the 16th March online event as a volunteer for the BeAI initiatives of 2021 as both speaker and participant to the roundtable discussion for "Gender Imbalance, AI Mentorship, and good Delivery in AI projects"

Available Web Pages

- LinkedIn: <https://www.linkedin.com/in/luciana-morogan-a7879568/>
- ReserchGate: https://www.researchgate.net/profile/Luciana_Morogan
- Web of Science ResearcherID: AAW-3007-2020
- ORCID: <https://orcid.org/0000-0002-3119-152X>

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Luciana MOROGAN