



Europass Curriculum Vitae

Personal information

First name(s) / Surname(s) **Octavian-Cezar Pastravanu**

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Nationality Romanian

Date of birth 16/05/1957



Work experience

Dates	1994 - present
Occupation or position held	Member of Academic Staff (Associate Professor 1994-1998, Full Professor 1998-present, PhD supervisor in "Systems Engineering" 2005 - present)
Main activities and responsibilities	Taught Disciplines: Systems theory, Neural network applications in control engineering, Discrete event systems, Physical system modeling. Research areas: Qualitative analysis of dynamical systems, Artificial Intelligence, Petri nets
Name and address of employer	Technical University "Gheorghe Asachi" of Iasi, Faculty of Automatic Control and Computer Engineering, Blvd. Dimitrie Mangeron Nr. 53A, Iasi
Type of business or sector	Education and research
Dates	1993 - 1994 (Academic year)
Occupation or position held	Associate researcher (postdoc fellowship awarded by The University of Texas System)
Main activities and responsibilities	Research areas: Discrete event manufacturing systems
Name and address of employer	Automation and Robotics Research Institute, The University of Texas at Arlington, 7300 Jack Newell Blvd. S., Fort Worth, TX 76118, USA
Type of business or sector	Research
Dates	1992 - 1993 (Academic year)
Occupation or position held	Associate researcher (postdoc fellowship awarded by The Belgian Government)
Main activities and responsibilities	Research areas: Artificial intelligence techniques in system identification and control
Name and address of employer	Department of Electrical Energy, Systems & Automation, The University of Ghent, Technologiepark 913, 9052 GENT, Belgium
Type of business or sector	Research
Dates	1986 -1992
Occupation or position held	Member of Academic Staff (Teaching Assistant 1986-1990, Assistant Professor 1990-1992)
Main activities and responsibilities	Taught Disciplines: Systems theory, Numerical computation, Control engineering Research areas: Modeling and simulation techniques, Real-time applications for process control, Artificial intelligence - Symbolic computation.
Name and address of employer	Technical University "Gheorghe Asachi" of Iasi (previously Polytechnic Institute), Faculty of Automatic Control and Computer Engineering, Dimitrie Mangeron no. 53A, Iasi
Type of business or sector	Education and research
Dates	1982 - 1986
Occupation or position held	Engineer

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Main activities and responsibilities | Design, implementation and testing of software products
 Name and address of employer | National Institute for Research and Development in Automation IPA-TCT Bucharest, Iasi Branch, Str. Horia Nr 5-8, Iasi
 Type of business or sector | Research and technological engineering

Education and training

Dates | **1993 - 1994**
 Title of qualification awarded | Research specialization
 Principal subjects/occupational skills covered | Control and computers: Discrete event manufacturing systems
 Name and type of organization providing education and training | Automation and Robotics Research Institute, The University of Texas at Arlington USA (postdoc fellowship awarded by The University of Texas System)
 Level in national or international classification | Postdoctoral studies

Dates | **1992 - 1993**
 Title of qualification awarded | Research specialization
 Principal subjects/occupational skills covered | Control and computers: Artificial intelligence techniques in system identification and control
 Name and type of organization providing education and training | Department of Electrical Energy, Systems & Automation, The University of Ghent, Belgium (postdoc fellowship awarded by The Belgian Government)
 Level in national or international classification | Postdoctoral studies

Dates | **1989 - 1992**
 Title of qualification awarded | PhD Diploma in Control Engineering
 Principal subjects/occupational skills covered | Control and computers: Analysis and control techniques for systems with unknown parameters.
 Name and type of organization providing education and training | Technical University "Gheorghe Asachi" of Iasi (previously Polytechnic Institute), Faculty of Automatic Control and Computer Engineering
 Level in national or international classification | Doctoral studies

Dates | **1977 - 1982**
 Title of qualification awarded | Engineering Diploma in Computers and Control, specialization Computers
 Principal subjects/occupational skills covered | Computers and Control
 Name and type of organization providing education and training | Polytechnic Institute "Gheorghe Asachi" of Iasi, Faculty of Electrical Engineering
 Level in national or international classification | University studies

Personal skills and competences

Mother tongue(s) | Romanian

Other language(s)

Self-assessment

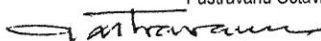
European level (*)

English

French

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
C1	Proficient User	C1	Proficient User	C1	Proficient User	C1	Proficient User	C1	Proficient User
C1	Independent User	C1	Proficient User	B2	Independent User	B2	Independent User	B2	Independent User

(*) Common European Framework of Reference for Languages



Social skills and competences	Communication and negotiation skills. Proficient collaboration as a team member.
Organizational skills and competences	Experience in managing academic activities (projects/collaborations on educational or scientific areas) at international and national level.
Technical skills and competences	Information Technology and Systems Engineering
Computer skills and competences	Advanced user - in accordance with professional tasks
Driving license	B category.

Additional information

Teaching and higher education development

Taught courses: Numerical methods, Systems theory, Discrete-event systems, Physical system modeling, Neural networks and fuzzy logic.

Textbooks and monographs: • 17 publications; • First monographs published in Romania on Petri nets (1997), bond graphs (2001).

Advances in higher education - • Ph.D. theses 5; • Knowledge-transfer papers 24.

International projects: Tempus-Phare • 0886 HECE (1991 - 1992), • 2011 IMPACT (1991 - 1994), • 11467 COMPANION (1996 - 2000) - member of the international steering committees.

Research

Current interests: • Polytopic and switching systems, • Discrete event systems, • Neural networks.

Previous interests: • Computer-aided analysis and design of control systems; • Process control; • Non-recursive models.

ResearcherID profile: <http://www.researcherid.com/rid/B-8401-2011>

GoogleScholar profile: <http://scholar.google.com/citations?user=7TDHVV8AAAAJ&hl=en>

h-index: • Web of Science 10, • Scopus 11, • Google-Scholar 16.

Citations: • Web of Science 470/415, • Scopus 663/570, • Google-Scholar 1285.

Indexed articles: • Web of Science (ISI) 72 (26 journals, 46 conferences), • Scopus 86 (29 journals, 57 conferences), • Google-Scholar 137 (49 journals, 88 conferences), • IEEE Xplore 49 (3 journals, 46 conferences), • Zentralblatt 56 (45 journals, 11 conferences), • DBLP 20 (12 journals, 8 conferences)

Publications: • Journal papers 54, • Conference papers 123, • Book chapters edited by international publishing houses 17, • Book and book chapters edited by national publishing houses 17.

Intellectual property: • US Patent 6,185,469 B1, • O.R.D.A. Certificate 1451/20.07.2004.

R&D grants: • Coordinator 5, • Partner team leader 2, • Team member 20.

R&D projects for enterprises: • The MathWorks Inc. – Third-Party Products (Petri Net Toolbox).

Awards

• "Tudor Tănăsescu" Award of the Romanian Academy (2007) for a group of papers on "Flow invariance in the qualitative analysis of dynamical systems" – published in 2005.

• Fellowship awarded by the University of Texas System (1993) for postdoctoral studies in Technical Sciences (Discrete event manufacturing systems).

• Fellowship awarded by the Belgian Government (1992) for postdoctoral studies in Technical Sciences (Artificial intelligence).

Synergistic activities

• Member of the Academy of Technical Sciences of Romania ASTR (2005 - present). Secretary of the ASTR Branch in Iasi.

• Member of the Committee "Engineering Sciences" of the National Research Council CNCSIS (2006 - 2011), CNCS (2011 - 2013).

• Member of the Committee "Computers, Information Technology and Systems Engineering" of the National Council of Titles, Diplomas and Certificates CNATDCU (2011 - present).

• Member of Technical Committee TC 1.3. Discrete Event and Hybrid Systems – IFAC "International Federation of Automatic Control" (2005 - present).

Work (10 relevant papers)

- Pastravanu, O., Matcovschi, M., 2015, Sufficient conditions for Schur and Hurwitz diagonal stability of complex interval matrices, *Linear Algebra and Its Applications*, vol. 467, pp. 149–173, ISSN: 0024-3795.
- Pastravanu, O., Matcovschi, M., 2014, Max-type copositive Lyapunov functions for switching positive linear systems, *Automatica-IFAC*, vol. 50, no. 12, 3323–3327, ISSN: 0005-1098.
- Pastravanu O., Matcovschi M., 2011, Comments on "Assessing the stability of linear time-invariant continuous interval dynamic systems", *IEEE Trans. Automatic Control*, vol. 56, no. 6, 1442-1445, ISSN: 0018-9286.
- Pastravanu, O., Matcovschi, M., 2010, Linear Time-Variant Systems: Lyapunov Functions and Invariant Sets Defined by Holder norms, *Journal of the Franklin Institute*, vol. 347, issue 3, pp.627-640, ISSN 0016-0032.
- Vrabie, D., Pastravanu, O., Abu-Khalaf, M., Lewis, F.L., 2009, Adaptive optimal control for continuous-time linear systems based on policy iteration, *Automatica-IFAC*, vol. 45, no. 2, 477-484, ISSN: 0005-1098.
- Pastravanu, O., Matcovschi, M., 2005, Absolute componentwise stability of interval Hopfield neural networks, *IEEE Trans. Systems Man and Cybernetics B*, vol. 35, no. 1, 136-41, ISSN: 1083-4419.
- Pastravanu, O., Voicu, M., 2004, Necessary and sufficient conditions for componentwise stability of interval matrix systems, *IEEE Trans. Automatic Control*, vol. 49, no. 6, 1016-21, ISSN: 0018-9286.
- Mahulea, C., Matcovschi, M., Pastravanu, O., 2004, Petri Net Toolbox for MATLAB, *The MathWorks Inc. USA, Third-Party Products*
http://www.mathworks.com/products/connections/product_detail/product_35741.html.
- Lazar, M., Pastravanu, O., 2002, A neural predictive controller for non-linear systems, *Mathematics and Computers in Simulation*, 60, 3-5, 315-24, ISSN 0378-4754.
- Lewis, F.L., Tacconi, A., Pastravanu, O., Gurel, A., 2001, Method and apparatus for testing and controlling a flexible manufacturing system, *United States Patent and Trademark Office, No. 6,185,469 B1*, Date of Patent: Feb.6, 2001.
<http://www.freepatentsonline.com/6185469.html>.

April 2, 2017

