

Europass Curriculum Vitae



Personal information

First name, Surname Cristina PUPĂZĂ

Occupational field Academic - Professor Habil.

Position Doctoral Thesis Supervisor

Work experience

Dates

Occupation or position held 2016 - present - **Professor Habil**.

2014 - 2016 - Professor

1997 - 2014 - Associate Professor

1992 - 1997 - Lecturer 1985 - 1997 - Assistant

Main activities and responsibilities

Teaching and research activities, CAE responsible at Robots and Manufacturing Systems Department,

Quality Assurance Responsible at RMS Department

Courses: a) Undergraduate: Machine Tool Vibration, Structural behavior improvement, Database, Robots for special environments, Simulation software, Computer Aided Design, Computer Aided Engineering. b) Postgraduate: CAD-FEM Integration, Database - Design administration and modeling using IBM-DB2, Reverse engineering, Matériaux - modélisation des comportements et applications, Advanced modeling and simulation techniques, Advanced Computer Aided Engineering in Robotics

Name and address of employer

University Politehnica of Bucharest, Faculty of Industrial Engineering and Robotics, Department of

Robots and Manufacturing Systems, 313, Splaiul Independentei Avenue, Bucharest 6, RO-060032,

Romania

Type of business or sector Higher Education

Dates 1984 - 1985

Main activities and responsibilities Design engineer and group coordinator in projects regarding mechanical equipments: • Device for

oxygen blowing, • Robot for fire-proof bricks manipulation, • Ceramic Materials Mixer, • Oxygen for

furnace feeding system, • Flame cutting systems.

Name and address of employer IPROMET – Engineering & Designing Institute for the Iron and Steel Industry, Machinery

Department, 20A Constructorilor Boulevard, Bucharest 6, Romania, RO - 060512

Type of business or sector Design & Research

Dates

1983 - 1984

Occupation or position held

Production Engineer

Main activities and responsibilities

Machine tool installation and maintenance for:

◆ Wire machining systems and

◆ External grinding machines

Name and address of employer

Enterprise for Special Steel, 9 - 11 Gaesti Avenue, Targoviste, Romania, RO - 130087

Type of business or sector

Manufacturing

Education and training

Dates

1978 - 1983

Title of qualification awarded

Dipl. Engineer

Occupational skills covered

Mechanical Engineering

Name and type of organization providing education and training

University *Politehnica* of Bucharest, Faculty of Management and Engineering of Technological Systems, 313, Splaiul Independentei Avenue, Bucharest 6, RO-060032, Romania

Level in national or international classification

Dipl. Engineer

Dates

1996

Title of qualification awarded

Dr.-Ing.

Principal subject

Doctoral Thesis: The Influence of the Elastic Deformation of the Machine Tool Structural Elements on the Cutting Accuracy

Name and type of organization providing education and training

University Politehnica of Bucharest, Romania

Scholarships and training courses

- Oct. 1986 June 1987 Finite Elements Method and Applications in Steel Structures Computation at University of Civil Engineering, Bucharest, Romania
- 1987 Personal Computers at National Institute for Computational Technologies, Bucharest, Romania
- May 1995 Practical Design Calculations at Mech. Eng. Depart., Strathclyde University, Glasgow, U.K.
- Oct. 1955 Simulation Course Witness at University Politehnica of Bucharest, Romania
- July 2002 WebCT Complete Software Solution for Long Distance Learning at CYBERNETICS, Romania
- May 2003 Quality Management in Higher Education at Politehnica University of Bucharest
- Aug. 2003 External Auditing Staff for Quality Management Systems at Romanian Society for Quality Assurance, Sinaia, Romania
- June 2005 DB2. Fundaments and Administration, IBM, Romania
- Nov. 2005 DB2. Content Management. IBM, Romania
- June 2006 Rational Unified Processes. Fundaments, IBM, Romania
- Sept 2006 Rational Unified Processes Applications, IBM, Romania
- Nov. 2007 & Mars 2008 Numerical Controlled Machine Tools, Titan Automatization, Romania
- Dec. 2008 Introduction to ABAQUS-SIMULIA, Dassault Systèmes, SIMULIA Europe
- Feb. 2009 Contact technology in ABAQUS SIMULIA, Dassault Systèmes, SIMULIA Europe

Grants and participation

in European projects

- March June 1995: **EU Programme** TEMPUS **PhD. Mobility Grant**. Subject: Computer Aided Engineering at Mechanical Engineering Department, Strathclyde University, Glasgow, U.K.
- April Oct. 1997: Postdoctoral Research Grant French Research Project Région: RHONE Alpes:
 PROMOTEUR. Subject: Simulation du Comportement Dynamique des Pieces Minces at "Laboratoire de Conception et Analyse des Systemes Mecaniques", Institut National des Sciences Appliquées de Lyon, France.
- Nov. 2002 Jan. 2003: **NATO** Science Fellowship. **Postdoctoral research grant** Research Project, CAD/CAE Integration for Structural Analysis, at Machine Elements & Machine Design Laboratory, Aristotle University of Thessaloniki, Greece
- Oct. 2003 July 2004: HELENIC STATE SCHOLARSHIP FOUNDATION (I.K.Y.) Post Doctoral Research Project, Subject: CAD - CAE Integration, at Machine Elements & Machine Design Laboratory, Aristotle University of Thessaloniki, Greece
- March 2006 June 2006: **Greek Romanian Research Project**, Subject: New Modeling Techniques, at Machine Elements & Machine Design Laboratory, Aristotle University of Thessaloniki, Greece

International awards

Best Presentation & Best Poster at International Symposium in Intelligent Manufacturing & Automation, Vienna Austria, 2009

Personal skills and competences

CAD - CAE, Modeling, Structural Analysis, Simulation, Optimization, Data Base

Robotics

Mother tongue

Romanian

Other languages Self-assessment European level

English

French*

		Understanding				Speaking				Writing	
	Listening		Reading		Spoken interaction		Spoken production				
С	1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user	
В	31 *	Independent user	B1 *	Independent user	B1 *	Independent user	B1 *	Independent user	B1 *	Independent user	

^{*} DELF B1 - Session 2007-02-T, ATTESTATION DE RÉUSSITE no. 040001-007697.

Social skills and competences

- team spirit: I participated at 33 research & design projects in Romania and abroad.
- good ability to adapt and work in multicultural environments gained throughout my work experience abroad: U.K., France, Greece

Organizational skills and competences

Project coordinator and **team management**: at University Politehnica of Bucharest I was **Project Coordinator** in **8** Research Projects, working in teams with more than 20 participants

Technical skills and competences

- My field of expertise is CAD/CAE, vibration, metal matrix composites, CFD, optimization, explicit and implicit procedures. I have a good command of database fundamentals and applications. In 2003-2004 I took part in the team for implementing Total Quality System at Politehnica University of Bucharest. This experience was acquired during training and voluntary activities.
- Virtual reality, IoT, Machine Learning
- Robotics

Computer skills and competences

Experienced with the following software:

- CAE: ANSYS and APDL ANSYS, Nastran, ABAQUS
- Pre and Post Processing Systems: ANSA, EPILYSIS, META-Post
- CAD: AutoCAD and AutoLISP, SolidWorks, CATIA, ProEngineer
- Database: DB2, SQL
- Computational Methods: Matlab and SIMULINK
- E-Learning: WebCT

Educational projects

- 2007-2021 Coordinator of **ERASMUS LLP** agreements with Machine Elements & Machine Design Laboratory, Aristotle University of Thessaloniki, Greece
- 2005-2007 Participant in **IBM Country Project Romania -** Promoting DB2 Information Management Software in Romanian Technical Universities, at Faculty of Automatic Control and Computer Science, University Politehnica of Bucharest, Linux Center

Publications

9 books at Romanian Publishing houses; **5** scientific papers in periodicals (IF); **44** scientific papers ISI & Int. DB; **32** presentations at Conferences, **12** papers at national and international workshops & seminars, **1** patent.

Professional organization Membership

- IEEE Romania
- ICMAS
- AGIR General Association of Engineers in Romania
- ARTEN Romanian Association for Unconventional Technologies
- CERTIP Romanian National Org. for the Certification of Personnel in Higher Education
 ONCERSIS Romanian National Org. for the Certification of Management Systems in Higher
- Education

Scientific Reviewer for Doctoral Theses

2011, 2012, 2016, 2017, 2019 at University Politehnica of Bucharest 2016, 2017 at Military Technical Academy, Romania

Additional information

- since 2021 Member of the Ethics Commission at Industrial Engineering and Robotics Doctoral School
- since 2020 Member of the Ethics Commission at University Politehnica
- since 2014 Member of the Industrial Engineering and Robotics Faculty Council
- since 2014 Member of the Industrial Engineering and Robotics Faculty Quality Management Commission
- since 2014 Member of the Robots and Manufacturing Systems Department Council
- 2018, 2019 Reviewer IEEE Internet of Things Journal IF
- since 2018 Reviewer University Politehnica of Bucharest Scientific Bulletin, Series D, Mechanical Engineering
- since 2019 **Evaluator Expert** at UEFISCDI Romanian Executive Agency for Higher Education, Research, Development and Innovation Funding
- since 2017 Member in the Editorial Board of Proceedings in Manufacturing Systems Journal
- 2017 Member in the Scientific Committee MIT Conference and workshop, Sinaia 2017
- 2016 **Project Evaluator** at University Politehnica of Bucharest Excellence in research grants
- since 2016 Reviewer Journal Proceedings in Manufacturing Systems, Int.DB
- 2014 Reviewer and Member of the Scientific Committee: International Conference of Technology for Polymeric and Composites Products, POLCOM 2014, Applied Mechanics and Materials, Vol. 760, ISSN 1662-7482, DOI: 10.4028/www.scientific.net/AMM.760.557
- 2012 **Reviewer** and **Member of the Scientific Committee**: International Conference on Power Transmissions, 20-23 June 2012, organized by the Balkan Association for Power Transmissions, Springer Netherlands, ISBN 978-94-007-6558-0, ISSN 2211-0984, BDI: Springer Link, Google Scholar, DOI: 10.1007/978-94-007-6558-0 38
- 2010 **Reviewer** and **Member of the Scientific Committee** "Optimization of the Robots and Manipulators", OPTIROB 2010, ISBN: 978-981-08-5840-7, Design, CRC & Printed by ITEK CMS Web Solutions, Singapore, Editor Adrian Olaru
- 2009 **Reviewer** and **Member of the Scientific Committee**: International Conference on Power Transmissions, October, 2009, organized by the Balkan Association for Power Transmissions in Kallithea, Greece
- 2000, 2001, 2002 Evaluator Expert in RELANSIN Romanian Research Programme
- Scientific Reviewer Ghionea, I Proiectare asistată în CATIA v5. Elemente teoretice și aplicații, Editura BREN

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