



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

Occupation or position held

Design engineer

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 <i>Politehnica</i> 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 <i>Politehnica</i> 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. 1995 - 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. Fundamentals and Administration, IBM, Romania
- Nov. 2005 - DB2. Content Management. IBM, Romania
- June 2006 - Rational Unified Processes. Fundamentals, 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			
C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user
B1*	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
- Experienced researcher, responsible for modeling and simulation activities for the Project (ID POC: 120353/2022) “Innovative technologies for processing and testing advanced aerospace materials”, Ministry of European Investments and Projects, 2022-2023

Computer skills and competences	<p>Experienced with the following software:</p> <ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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	<p>9 books at Romanian Publishing houses; 6 scientific papers in periodicals (IF); 50 scientific papers ISI & Int. DB; 32 presentations at Conferences, 12 papers at national and international workshops & seminars, 1 patent.</p>
Professional organization Membership	<ul style="list-style-type: none"> - 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	<p>2011, 2012, 2016, 2017, 2019 at University Politehnica of Bucharest 2016, 2017 at Military Technical Academy, Romania Coordination of the Doctoral Thesis - presented in 2021 at Univeristy Politehnica of Bucharest</p>

Additional information

- 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 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
- 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

March 2022