

Monica Vlădoiu

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PROFESSIONAL EXPERIENCE

2009-present **Petroleum-Gas University of Ploiesti (UPG), Romania – Associate Professor**

Department of Computer Science, Information Technology, Mathematics and Physics (iTIMF)

- didactic activities (lectures, laboratories, projects, theses, others):
 - master: Multimedia Databases, Information Retrieval Systems, Digital Libraries, Relational Databases and Database Management Systems, Informational Paradigms of Knowledge Society, Scientific Research Methodology, Advanced Topics in Computer Science, Ethics in Computer Science;
 - bachelor: Operating Systems, Databases, Data Structures and Algorithms, Database Management Systems, Software Engineering;
 - elaboration of instructional support materials (both traditional and electronic);
 - practicing reflexive student-centered teaching and learning, and open pedagogy;
 - supervising research and development graduation theses, Bachelor (210+, since 1997), Master (85+, since 2005) ;
 - member in theses' examination committees for undergraduate & graduate study programs in Computer Science (Bachelor – 1997-2000, Master – 2005-present);
- scientific research & development activities:
 - local/national research and development projects;
 - research dissemination in scientific papers and books;
- scientific and education community support activities:
 - peer-reviewing papers & books, member of program committees/editorial boards for conferences/scientific journals;
 - developing instructional support software tools;
 - member of teams that organize scientific and student events;
 - participating in contest and examination committees for teaching and research positions, PhD exams, doctoral thesis examination committees;
 - member in post-graduation commissions for obtaining K-12 teacher degrees (1st & 2nd-degree certified teacher), supervising theses for 1st degree teacher-until 2014;
 - contributing to evolution of our InfoUPG community both in real-world and on our extended Discord-based educational platform;
- managerial activities:
 - active member of the team that maintains the Computer Science study programs in UPG (undergraduate - 3 years, master - 2 years);
 - coordinator of the master program Advanced Technologies for Information Processing and of the Computer Science domain;
 - member of the commission that monitors and provide for maintaining accreditation for both Computer Science programs (Bachelor, Master);
 - updating curricula and syllabuses of Computer Science programs in UPG;
 - co-founder&coordinator - Computer Science & Education Lab (1/2, 2017-present);
 - co-founder & board member of the CerTIMF Research Center of UPG (since 2013).

Curriculum vitae

Last update 2026.02/01

1996-2009

Petroleum-Gas University of Ploiesti (UPG), Romania – Assistant Professor

Department of Computer Science, Information Technology, Mathematics and Physics (iTIMF)

- didactic activities (lectures, laboratories, projects, theses, others):
 - master: Multimedia Databases and Applications, Digital Libraries, Relational Databases and Database Management Systems, Managerial Informatics (INDE Ploiești - CNAM Paris);
 - bachelor: Operating Systems, Computer Programming (Pascal, C, Assembler), Numerical Calculus, Object Oriented Programming (C++, Java), Databases, Data Structures & Algorithms, Database Management Systems, Software Engineering;
 - elaboration of instructional support materials (both traditional and electronic);
 - practicing reflexive teaching and learning;
 - supervising research and development graduation theses;
 - member in theses' examination committees for undergraduate and graduate study programs in Computer Science;
- scientific research & development activities:
 - local/national research and development projects;
 - research dissemination in scientific papers and books;
- scientific and education community support activities:
 - peer-reviewing papers & books;
 - developing instructional support software tools;
 - member of teams that organize scientific and student events;
 - participating in contest committees for teaching & research positions;
 - member in post-graduation commissions for K-12 2nd-degree certified teacher;
 - enabler of student debate circle on Advanced Software Technologies;
 - member in the committee of the Best Programmer contest;
 - member in the committee of the student research seminar in Computer Science;
 - contributing to evolution of our InfoUPG community;
- managerial activities:
 - active member of the team that maintains the Computer Science study programs in UPG (undergraduate - 3 years, master - 2 years);
 - co-founder & coordinator of the master program Advanced Technologies for Information Processing (since 2004);
 - member of the commission that monitors and provide for maintaining accreditation for both Computer Science programs (Bachelor, Master);
 - updating curricula and syllabuses of Computer Science programs in UPG;

2002-2003

International Scientific-Practical Summer School "Intelligent Systems" (IS'02, IS'03),

Sumy State University of Ukraine, Gurzuf, Crimeea

- Invited speaker June 2002 and June 2003
 - Topic IS'02: Models of knowledge authoring in distance e-learning systems
 - Topic IS'03: Models and supporting software in e-learning

1991-1996

Petroleum-Gas University of Ploiesti (UPG), Romania – Assistant Professor

Department of Computer Science, Information Technology, Mathematics and Physics (iTIMF)

- didactic activities (lectures, laboratories, projects, theses, others):
 - bachelor: Operating Systems, Computer Programming (Pascal, C, Assembler), Numerical Calculus, Object Oriented Programming (C++, Java), Databases, Data Structures and Algorithms, Database Management Systems, Managerial Informatics, Using Computers in Drilling;

Curriculum vitae

Last update 2026.02/01

- elaboration of instructional support materials (both traditional and electronic);
- scientific research & development activities:
 - local/national research and development projects;
 - research dissemination in scientific papers and books;

OTHER MANAGERIAL EXPERIENCES

- 03/2016– 06/2018 **Petroleum-Gas University of Ploiesti (UPG), Romania**
Member in The University Senate
- 01/2016–01/2020 **Petroleum-Gas University of Ploiesti (UPG), Romania**
Member in The Council of the Department of Computer Science, Information Technology, Mathematics and Physics (iTIMF)
- 02/2012-04/2018 **Petroleum-Gas University of Ploiesti (UPG), Romania**
Vice-Dean of The Faculty of Letters and Sciences
- 2012-2020 **Petroleum-Gas University of Ploiesti (UPG), Romania**
2004-2008 **Petroleum-Gas University of Ploiesti (UPG), Romania**
Member in The Council of The Faculty of Letters and Sciences
- Petroleum-Gas University of Ploiesti (UPG), Romania**
Editor-in-chief of the scientific journal Bulletin of UPG University of Ploiesti, Series Mathematics, Informatics, Physics Series (BMIF)
- 2009-2010
 - main contributions: increasing the National Council For Scientific Research journal rank from D to B+, internationalizing the editorial board, architecture and development of the journal's online peer review and publishing system, scientific reviewing, international database indexing (<http://bmif.unde.ro>)
- 2008-present **ZealSoft Ltd., Bucharest, Romania**
Coordinator of/member in the teams of research and development software projects
- 2005 **Petroleum-Gas University of Ploiesti (UPG), Romania**
main contributor to the creation of the CS undergraduate program
- 2004 **Petroleum-Gas University of Ploiesti (UPG), Romania**
main contributor to the creation of the Computer Science master program & coordinator
- 1992 **Petroleum-Gas University of Ploiesti (UPG), Romania**
main contributor to the creation of the Mathematics-Informatics undergraduate program
- Petroleum-Gas University of Ploiesti (UPG), Romania**
coordinator/director of research and development projects/grants
- 1993-2017
 - IntelSec – Intelligent System for Monitoring Wearing the Protective Gear used in high voltage electrical networks, based on RFID and wireless technologies, PN-III-P2-2.1-CI-2017-0262, 07.2017 – 12.2017;
 - MNECLIB2 – A Classical Music Digital Library with Bilingual Subject-based Information Retrieval (10000+ CDs limited edition), 2011-2015;
 - ePH – Framework for building of a dynamic user community sharing context-aware public interest Information or knowledge through always-on services, 2007 – 2012;
 - MIMAL - Integrated Multimedia Model for Interactive Learning generated at Petroleum-Gas University of Ploiești, 39691/1999, 1999–2001;
 - MOSS - Research and Experiments Regarding Safety of Open Systems, contract C020/5.1.5/1994, cod UNESCO: 1203/18, 1993 – 1995;

EDITORIAL AND REVIEWING EXPERIENCE

- Member in the Editorial Board and/or Reviewer of International Journals**
The Visual Computer, The Electronic Journal of e-Learning, International Journal of Computers, Communications & Control, Journal of Digital Information Management, International Journal of Digital Information and Wireless Communications, International Journal of New Computer Architectures and Their Applications, Journal of Social Networking and Virtual Communities
- 2010-present
- Member in the Editorial Board/Reviewer of International Conferences**
More than 50 conferences
- 2010-present
- Member in the Editorial & Review Board of The Publishing House of UPG University**
Scientific Editor and Reviewer
- 3009-present
- Petroleum-Gas University of Ploiesti (UPG), Romania**
Editor-in-chief of the scientific journal Bulletin of UPG University of Ploiesti, Series Mathematics, Informatics, Physics Series (BMIF)
- 2009-2010
- Coordinator/Member of Team Organizing Scientific and Student Events**
- 1992-present

EDUCATION

- Norwegian University of Science and Technology (NTNU), Trondheim, Norway**
Department of Computer and Information Sciences (IDI)
- 11/2002-08/2003
- Post-doctoral research fellowship awarded by European Research Consortium for Informatics and Mathematics; research focus: models for e-learning and related aspects (multimedia information systems, digital libraries, interfaces, etc.).
- “Politehnica” University of București (UPB), București, Romania**
Department of Computer Science and Engineering (CS)
PhD in Computer Science; thesis: A Multimedia Object Model
- 1994-2002
- Otto von Guericke University, Magdeburg, Germany**
Institute for Technical and Business Information System (ITI)
TEMPUS scholarship: IMG RO-1023/97; Research focus: Object Oriented Databases
- 09/1998-12/1998
- “Politehnica” University of București (UPB), București, Romania**
Department of Computers Science and Engineering (CSE)
MSc in Software Systems; thesis: C Language Interface for GT300 Graphic Workstation
- 1986-1991

PROFESSIONAL AND PERSONAL SKILLS

- theoretical and practical knowledge of software engineering, complex data structures and algorithms, digital libraries, information retrieval systems, databases, database management systems, multimedia information systems, object-oriented methodologies, object oriented databases, desktop grid computing, multiagent systems, context-aware services and systems, instructional design, open educational resources and open courseware, open pedagogy, learning objects, e-learning, reflective learning, blended learning, ubiquitous learning, adaptive instruction environments, e-society, knowledge society;
- extensive work experience in various aspects of computer software analysis, design, static verification, development, testing, and evolution;

Curriculum vitae

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- able to use difficult algorithms, protocol specifications, and to optimize programs;
- programming languages: Pascal, C, Lisp, Prolog, C++, Java;
- databases: Informix, MySQL, PostgreSQL;
- operating systems: CPM, Unix, Linux, Windows, Solaris;
- excellent Mathematics & Physics background and very good analytical skills;
- able to coordinate R&D teams, communication, initiative, determination, patience, working well under stress, able to work both independently or within a team, problem-solving, self-management, self-motivated, task-oriented, efficient and quick learner, innovative and critical thinking, imaginative;

MEMBERSHIPS

- ACM SIGCSE Special Interest Group in Computer Science Education 2016-2020;
- ACM (Association for Computing Machinery), 2008-2021;
- IEEE (Institute of Electrical and Electronics Engineers), 2008-2011;
- INSTICC (Institute for Systems and Technologies of Information, Control and Communication), 2009-present;

LANGUAGES

- Romanian – native, English – very good, French - good; Spanish&Russian–satisfactory

PUBLICATIONS

- over 85 peer-reviewed scientific papers published in scientific journals and conference proceedings;
- 8 academic books (national) and 2 book chapters (international);

PROJECTS

- member of project teams for 32 grants and projects;
- coordinated 5 projects/grants;
- 14 grants and projects awarded in competitions (national - 9, international - 5);
- 20 research and development projects;

OTHER

- references available upon request;
- lists of publications and/or projects available upon request;
- further details at <http://www.unde.ro/monica>