



**Europass  
Curriculum Vitae**

**Personal information**

First name(s) / Surname(s) **Daniela Coman**  
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E-mail [amdcoman@yahoo.com](mailto:amdcoman@yahoo.com)  
  
Nationality Romanian  
  
Date of birth 30 July 1973  
  
Gender Female

**Desired employment /  
Occupational field** **Associate Professor Ph.D.**

**Work experience**

Dates **2014 – present**  
Occupation or position held **Associate Professor**  
Main activities and responsibilities **Academic and research activity**  
Name and address of employer Faculty of Mechanics, Department of Engineering and Management of Technological Systems, Drobeta Turnu Severin, University of Craiova, Romania  
Type of business or sector Higher education  
Dates **2011 – 2014**  
Occupation or position held **Assistant Professor**  
Main activities and responsibilities **Academic and research activity**  
Name and address of employer Faculty of Mechanics, Department of Engineering and Management of Technological Systems, Drobeta Turnu Severin, University of Craiova, Romania  
Type of business or sector Higher education  
Dates **2007 – 2011**  
Occupation or position held **Assistant Professor**  
Main activities and responsibilities **Academic and research activity**  
Name and address of employer Faculty of Engineering and Management of Technological Systems, Drobeta Turnu Severin, University of Craiova, Romania  
Type of business or sector Higher education  
Dates **2003 – 2007**  
Occupation or position held **Assistant univ. eng.**  
Main activities and responsibilities **Academic and research activity**  
Name and address of employer Faculty of Engineering and Management of Technological Systems, Drobeta Turnu Severin, University of Craiova, Romania

Type of business or sector	Higher education
Dates	<b>1997 – 2003</b>
Occupation or position held	<b>Engineer</b>
Name and address of employer	Severnav Shipyard, Drobeta Turnu Severin, Romania
Dates	<b>1996 – 1997</b>
Occupation or position held	<b>Teacher</b>
Main activities and responsibilities	<b>Didactic activity</b>
Name and address of employer	High school of mathematics-physics „Traian” , Drobeta Turnu Severin, Romania
Type of business or sector	High school education
Dates	<b>2007 – 2012</b>
Occupation or position held	<b>Coordinator – ECDL Test Centre no. 426</b>
Main activities and responsibilities	<b>Coordination of Test Centre</b>
Name and address of employer	ECDL Test Center no. 426 - Faculty of Engineering and Management of Technological Systems, Drobeta Turnu Severin, University of Craiova, Romania
Type of business or sector	ECDL Training/Review

### **Education and training**

Dates	<b>2002 – 2009</b>
Title of qualification awarded	PhD. in Engineering Sciences, Domain: Automatic Science
Principal subjects/occupational skills covered	PhD Thesis title: Fuzzy algorithms for the soccer robots control, scientific coordination: Prof. dr. eng. Mircea Ivanescu, defended on: 09.01.2009
Name and type of organisation providing education and training	Faculty of Automatics, Computers and Electronics, University of Craiova, Romania
Dates	<b>2006 – 2007</b>
Title of qualification awarded	Postgraduated studies: “ <i>Technical Informatics</i> ”
Name and type of organisation providing education and training	Faculty of Engineering and Management of Technological Systems, Drobeta Turnu Severin, University of Craiova, Romania
Dates	<b>2004 – 2005</b>
Title of qualification awarded	Postgraduated studies: “ <i>Computer Aided Design</i> ”
Name and type of organisation providing education and training	Faculty of Engineering and Management of Technological Systems, Drobeta Turnu Severin, University of Craiova, Romania
Dates	<b>1995 – 1996</b>
Title of qualification awarded	Special student – program TEMPUS PEC 3517
Name and type of organisation providing education and training	Artois University, Technological Institute of Béthune, France
Dates	<b>1993 – 1996</b>
Title of qualification awarded	Certificate of graduation, specialization: <i>Management</i>
Name and type of organisation providing education and training	Faculty of Management in Production and Transport , “Politehnica” University, Timisoara, Romania
Dates	<b>1991 – 1996</b>
Title of qualification awarded	Engineer, specialization: <i>Industrial Robots</i>
Name and type of organisation providing education and training	Faculty of Mechanics, Dept.: Mechatronics, “Politehnica” University, Timisoara, Romania
Dates	<b>1987-1991</b>

Title of qualification awarded	Baccalaureate Diploma
Name and type of organisation providing education and training	High school of mathematics-physics „Traian” , Drobeta Turnu Severin, Romania
<b>Personal skills and competences</b>	
Other language(s)	1. English 2. French
Organisational skills and competences	Team working skills, coordination and organisational skills
Technical skills and competences	Robotics, Fuzzy control systems, Computer Aided Design, Modeling and simulation, Computer programming and programming languages
Computer skills and competences	<ul style="list-style-type: none"> <li>• Operating Systems: Windows, Linux</li> <li>• Computer Aided Design: AutoCAD, Mechanical Desktop, Inventor, Solid Works, Solid Edge, 3D Studio Max</li> <li>• MS Office Applications (Certified Examiner of European Computer Driving Licence)</li> <li>• Programming languages: Turbo Pascal, C/C++, C#, CSS, Visual FoxPro</li> <li>• Other software applications: MatLab, LabVIEW, Maple, Cosmos, Ansys, HTML, XHTML</li> </ul>
Driving licence	B category
<b>Annexes</b>	participation in international programmes, european programmes, national programmes, research activity, publications, membership to scientific and professional organisations, awards, other professional activities, summer schools, workshops.

Nov. 2014

## Annexes

### International research activity:

1. Bilateral cooperation project, Turkey, no. 396/27.04.2010, coordinator : University of Craiova through prof. dr. eng. Bizdoaca Nicu, title: **Development of biomimetic design methodology with reverse engineering in cognitive recognition and control of biomimetic robots**, funding course: 2010 – 2012.
2. Bilateral cooperation project, South Korea, no. 415/19.05.2010, coordinator : University of Craiova through prof. dr. eng. Bizdoaca Nicu, title: **Reverse engineering in cognitive recognition and control of biomimetics structures**, funding course: 2010 – 2012.

### National research activity:

1. Research grant PNCDI-II no. PN-II-PT-PCCA-2011-3.1-0252, beneficiary: UEFISCDI; coordinator: University of Craiova; project manager: Prof. Gingu Oana; title: Research of the bone substitution with biocomposite materials processed by powder metallurgy specific techniques”, funding course: 2014-2016
2. Contract No. PN-II-PT-PCCA-2011-3.1-0252, supported by Ministry of Research and Education from Romania, title: **Hyperthermic magnetic nanoparticle ablation of liver and pancreatic tumors**, partner: University of Craiova, partnership coordinator: Assoc. Prof. dr. eng. Lucian Gruionu, funding course: 2012-2015
3. Contract No. PN-II-PT-PCCA-2011-3.2-0503, supported by Ministry of Research and Education from Romania, title: **Virtual Palpation SYSTEM for advanced training, medical diagnostic and treatment**, partner: University of Craiova, partnership coordinator: prof. dr. eng. Bizdoaca Nicu, funding course: 2012-2015
4. Research Grant no. 289/2008, type PN II, beneficiary: Ministry of Education and Research, grant coordinator: prof. dr. eng. Bizdoaca Nicu, title: **Reverse engineering in the cognitive modelling and the control of biomimetic structures**, funding course: 2008 – 2010;
5. Research Grant no. 71-135/2007, type PN II – PC, beneficiary: Ministry of Education and Research, coordinator: Institute of Welding and Materials Trials ISIM, Timisoara; partnership: University of Craiova, Faculty of Engineering and Management of Technological Systems Drobeta Turnu Severin, partnership coordinator: prof. Mangra Mihail, title : **Systems of microjunction for elements of circuit and package of microsensors and actuator**, funding course: 2007-2010;
6. Research Grant EXCELENCE RESEARCH (CEEX) no. 259/2006, beneficiary: Ministry of Education and Research, grant coordinator: prof. dr. eng. Mircea Ivanescu, title: **Control and technological integration of the smart materials and structures**, funding course: 2006 – 2008;
7. Research grant EXCELENCE RESEARCH (CEEX) no. 85/2006, beneficiary: Ministry of Education and Research, coordinator : University of Craiova, Faculty of Engineering and Management of Technological Systems, Drobeta Turnu Severin, Romania through prof. dr. eng. Mihail Mangra, title: **Knowledge development on the elaboration and microprocessing of the nanostructured materials for MEMS components by powder metallurgy technology**, funding course : 2006-2008;
8. Research grant EXCELENCE RESEARCH (CEEX) no. 131/2006, beneficiary: Ministry of Education and Research, grant coordinator: Assoc. Prof. dr. eng. Lucian Gruionu; title: **Long term improvement of life quality for patients with arthroplasty through prosthesis functionality extension**, funding course : 2006-2008;
9. Research grant EXCELENCE RESEARCH (CEEX) no. 94/2006, beneficiary: Ministry of Education and Research; coordinator: Institute of Chemic-Physics „I.G. Murgulescu”, Bucharest, Romania; partner: University of Craiova, Faculty of Engineering and Management of Technological Systems, Drobeta Turnu Severin; partnership coordinator: prof. Mihail Mangra, title : **The influence of the composition and the structure on the thermodynamical, electrical and magnetic properties of the micro- and nanostructured oxidic materials with special magnetoresistive properties**, funding course: 2006-2008;
10. Research grant code 28/2005, beneficiary: National University Research Centre N.U.R.C. (C.N.C.S.I.S.), grant coordinator: assist prof. Lucian Gruionu; title: **FEM studies on the shape and material influence of the knees endoprosthesis performances**, funding course : 2005-2006.

#### Internal research grant:

1. Research Grant no. 7C/2014 awarded in the internal grant competition of the University of Craiova, title: **Intelligent systems in industrial applications based on shape memory alloys**, 2013/2014, project director.

#### Training activity in university technical domain:

1. POSDRU project, axis 1, direction 1.2, 2009-2011, Specialization of the university staff for „Supervisor Academic Staff” for industrial/technological practice and research activity, coordinator Technical University „Gheorghe Asachi”, Iasi; funding course: 2009-2012 (long term expert in technical field)
2. Program code RO 2002/000 - 586.05.02.02.160, beneficiary: Agency for Development of South-West Oltenia region, Phare 2002 Program / Human resources development; title: Improvement and entrepreneurial development in technics field, funding course: 2004

#### Publications:

1. **Coman D.**, Ionescu A., *Computational Analysis of the Cauchy Problem associated to the Kinematic Model of a Mobile Robot*, Journal of Boundary Value Problems, Springer, ISSN 1687-2770, 2013
2. Ionescu A., **Coman D.**, *New approaches in computational dynamics of the mixing flow*, Journal of Applied Mathematics and Computation. Elsevier, Vol. 218, p. 809 – 816, ISSN 0096 – 3003, 2011.
3. **Coman D.**, Bizdoaca N, Petrisor A., Ionescu A., Florescu M., *Modeling and Analysis of Soccer Robot Tasks using Generalized Stochastic Petri Net*, 2010 International Conference on Robotics (ROBOTICS'10), 23 - 25 September 2010, Journal of Solid State Phenomena, Robotics and Automation Systems, Vols. 166-167 (2010) p. 133-138, ISSN: 1662-9779.
4. Bizdoaca N., Hamdan H., **Coman D.**, Petrisor A., Bizdoaca E., *Biomimetic Control Architecture for Robotic Cooperative Tasks*, Journal of Artificial Life and Robotics – Springer, vol. 15, nr.4, p. 403-407, DOI: 10.1007/s10015-010-0830-7, 2010
5. Florescu M., Petrisor A., **Coman D.**, *Dynamical Analysis of the 2-dimensional tentacle robot*, 2010 International Conference on Robotics (ROBOTICS'10), 23 - 25 September 2010, Journal of Solid State Phenomena, Robotics and Automation Systems, Vols. 166-167 (2010), p. 209-214, ISSN: 1662-9779.
6. **Coman D.**, Ionescu A., *A Stochastic Petri Net Approach for the Manufacturing System Design*, Proceedings of the 14<sup>th</sup> WSEAS International Conference on SYSTEMS, 22-24 iulie 2010, Grecia, p. 544 – 549, ISSN 1792-4235, ISBN: 978-960-474-199-1.
7. Bizdoaca N., **Coman D.**, Hamdan H., Khalid Al Mutib, *Robot Soccer Strategy – Biomimetic Approach*, The 7<sup>th</sup> International Conference on Informatics in Control, Automation and Robotics (ICINCO 2010), 15 – 18 June 2010, Portugal.
8. Bizdoaca N., Hamdan H., **Coman D.**, Petrisor A., Bizdoaca E., *Biomimetic Control Architecture for Robotic Cooperative Tasks*, The Fifteenth International Symposium on Artificial Life and Robotics 2010, 4 - 6 February 2010, Japan.
9. **Coman D.**, Ionescu A., *Performance Evaluation of a Flexible Manufacturing System using Timed Petri Nets*, Annals of DAAAM for 2009 & Proceedings of the 20<sup>th</sup> International DAAAM Symposium "Intelligent Manufacturing & Automation", 25 – 28 November 2009, Viena, p. 1815-1817, ISSN 1726-9679, ISBN 978-3-901509-70-4, Published by DAAAM International Vienna.
10. **Coman D.**, *Mobile Robot Path Tracking Using Fuzzy Logic*, Proceedings of the 13<sup>th</sup> WSEAS Multiconference CSCC (CSCC '09) CIRCUITS, SYSTEMS, COMMUNICATIONS AND COMPUTERS, 22-24 July 2009, Greece, p. 506 – 510, ISSN 1790-2769, ISBN 978-960-474-097-0.
11. **Coman D.**, Ionescu A., Florescu M., *Manufacturing System Modeling Using Petri Nets*, Recent Review – Technical results of our research, Univ. Braşov, ICEEMS, 26 - 27 November 2009, Brasov, Vol. 10, no. 3(27), p. 207 - 212, ISSN 1582-0246.
12. Ionescu A., **Coman D.**, *Improving the Behavior Quality of Excitable Media Phenomena Using Recent Computational Tools*, Recent Review - Technical results of our research, Univ. Braşov, ICEEMS, 26 - 27 November 2009, Brasov, Vol. 10, no. 3(27), p. 303 - 308, ISSN 1582-0246.
13. **Coman D.**, *A Petri Net-based Model for the Attacking Soccer Robots*, Proceedings of the 10<sup>th</sup> WSEAS International Conference on AUTOMATION and INFORMATION (ICAI'09), 23-25 March 2009, Prague, p. 186 – 191, ISSN 1790-5117, ISBN 978-960-474-064-2.

14. **Coman D.**, *Using Petri Nets in the Soccer Robot Control Architecture*, Annals of DAAAM for 2008 & Proceedings of the 19<sup>th</sup> International DAAAM Symposium "Intelligent Manufacturing & Automation", 22 – 25 October 2008, Slovakia, p. 295 – 296, ISSN 1726-9679, ISBN 978-3-901509-68-1, Published by DAAAM International Vienna.
15. **Coman D.**, Ionescu A., Petrișor A., *Petri Nets Based Approaches to the Control of the Soccer Robots*, Proceedings of the 4<sup>th</sup> International Conference ROBOTICS'08, 13-14 November 2008, Brasov, Vol. 15(50), p. 237 - 244, ISSN 1223 – 9631, ISBN 978 – 973-598-387-1.
16. **Coman D.**, Ionescu A., *Motion Control of Soccer Robot based on Fuzzy Logic*, Proceedings of the 6<sup>th</sup> International Conference of Computational Methods in Sciences and Engineering, 25 – 30 September 2008, Greece, Published by AIP Conference Proceedings 1148, Vol. 2, p. 57 – 60, ISBN 978-0-7354-0685-8, ISSN 0094-243X.
17. Ionescu A., **Coman D.** - *Qualitative behavior of mixing phenomena - the case of axisymmetric extensional Flows*, Proceedings of the 10<sup>th</sup> WSEAS International Conference on Mathematical Methods, Computational Techniques, and Intelligent Systems, 26 – 28 October 2008, Greece, p. 38 – 45, ISSN 1790-2769, ISBN 978-960-474-012-3.
18. Petrișor, A., Bizdoaca, N., Florescu, M., **Coman D.**, *Control Algorithm for a Mobile Robot Structure*, Proceedings of the 4<sup>th</sup> International Conference ROBOTICS'08, 13 - 14 November 2008, Brasov, Vol. 1, p. 231 - 236, ISSN 1223 – 9631, ISBN 978 – 973-598-387-1.
19. Florescu M., Petrișor A., **Coman D.**, *Smart Components in Robotic Structures*, Proceedings of the 4<sup>th</sup> International Conference ROBOTICS'08, 13-14 November 2008, Brasov, Vol. 15(50), p. 203 - 208, ISSN 1223 – 9631, ISBN 978 – 973-598-387-1.
20. Ionescu A., Savu D., Savu S., **Coman D.** - *Computational Features of Flow Modeling in Nanostructured Sensors*, Proceedings of the BICS'08 (Bio-Inspired Computational Methods) Conference, 6 - 7 November 2008, Tirgu Mures, Published by AIP Conference Proceedings.
21. **Coman D.**, - *The Implementation of the Motion Control for the Soccer Robot Using the Vector Field Method*, Review of Industrial Engineering, vol.2, 2008, Universitaria Printing House, Craiova.
22. **Coman D.**, Petrișor A., Ionescu A., Florescu M. - *Role Selection Mechanism for the Soccer Robot System using Petri Net*, Proceedings of the 3<sup>rd</sup> International Conference on "Computer as a Tool" – EUROCON 2007, 9-12 September 2007, Poland, p. 662 – 667, IEEE Catalog Number 07EX1617C, ISBN 978-1-4244-0813-9.
23. **Coman D.**, Petrișor A., *Fuzzy Logic Controller for Shooting Action of an Integrated Multi-agent Robot System*, Proceedings of ICEEMS2007 (International Conference on Economic Engineering and Manufacturing Systems), 20-22 October 2007, Brasov, Vol. 8, no. 3a(21a), p. 256 – 261, ISSN 1582-0246.
24. Petrișor A., Bizdoaca N., **Coman D.**, s.a., *Control Strategy of a 3 – DOF Walking Robot*, Proceedings of The 3<sup>rd</sup> International Conference on "Computer as a tool" – EUROCON 2007, 9 – 12 September 2007, Poland, p. 2337-2342, IEEE Catalog Number: 07EX1617C, ISBN 1-4244-0813 –9.
25. Ionescu A., **Coman D.**, Costescu M.,– *A Computational Approach of Turbulent Mixing. The Trajectories Analysis*, Proceedings of ICEEMS2007 (International Conference on Economic Engineering and Manufacturing Systems), 20-22 October 2007, Brasov, Vol. 8, no. 3b(21b), p. 498 - 501, ISSN 1582-0246.
26. **Coman D.**, Petrișor A., *A fuzzy logic controller for a two-wheeled mobile robot*, Bulletin of Technical Institute from Iasi, Section Machine Buildings, Proceedings of the 3rd International Conference ROBOTICS'06, 7 – 9 septembrie 2006, Iasi, p. 175-180, ISSN 1011-2855.
27. **Coman D.**, Petrișor A., *Obstacle Avoidance of Robot Soccer Using the Fuzzy Univector Field Method*, microCAD International Scientific Conference, 2006, Hungary, p. 13-18, ISBN 963-661-709-0.
28. **Coman D.**, *Modelling of Welding Robot in a CAD Environment Using B-Splines*, The 1st South-East European Welding Congress, Timisoara, 2006, p. 292-298, ISBN 973-8359-42-2.
29. Petrișor, A., **Coman D.**, Ravigan, F., Florescu, M., Vladu, C., *Evolution study of a walking robot, in uncertain environments, using "Three Legs Robot" Application*, Bulletin of Technical Institute from Iasi, Section Machine Buildings, Proceedings of the 3<sup>rd</sup> International Conference ROBOTICS'06, 7 – 9 September 2006, Iasi, p. 133 – 138, ISSN 1011-2855.
30. Petrișor A., Degeratu S., **Coman D.**, Cazacu D., *Circular Scanning Approach for Robot State Representation*, Scientific Bulletin of "Politehnica" University of Timisoara, Transaction on Automatic Control and Computer Science, 2006, vol. 51(65), no. 3, ISSN 1224 – 600X.
31. Petrișor A., Degeratu S., Ravigan F., **Coman D.**, Cazacu D., *"About the robot state in local and recent space"*, Proceedings of the 7<sup>th</sup> International Conference on Technical Informatics, vol. 1, Automation and Applied Informatics, CONTI 2006, 8-9 June 2006, Timisoara, p. 175 – 180, ISBN 973-625-320-1.

32. Petrisor A., **Coman D.**, "Control Structure of a Walking Robot with Prescribed Attitude of the Body", Proceedings of 5<sup>th</sup> International Conference on Electromechanical and Power Systems, Sielmen 2005, 6 – 8 October 2005, Chisinau, Rep.Moldova, pp. 683-686, ISBN general 973-716-208-0, ISBN vol. II 973-716-230-7.
33. Mangra M., Gingu O., Sima G., Dumitru N., Gruionu L.G., **Coman D.**, „Contributions to metallic matrix composites processing by powder metallurgy”, NANOMAT, Iasi, 2005.

#### **Books:**

1. **Coman D.**, *Modeling and simulation of manufacturing processes – Lecture Notes*, Universitaria Printing House, Craiova, 2013, ISBN: 978-606-14-0774-3
2. **Coman, D.**, *Soccer Robots. Modeling and simulation. Control algorithm*, Universitaria Printing House, Craiova, 2009, ISBN: 978 - 606 - 510 - 725 - 0
3. **Coman, D.**, *SolidWorks – Computer Assisted Design – Lecture Notes*, Universitaria Printing House, Craiova 2007, ISBN: 978 - 973 - 742 - 751 - 9
4. **Coman, D.**, ACCESS Databases, laboratory handbook, University of Craiova, 2004

#### **Society Memberships, Honors and Awards:**

- ROMANIAN SOCIETY OF AUTOMATION AND TECHNICAL INFORMATICS (SRAIT) (member)
- ROMANIAN SOCIETY OF ROBOTICS (SRR) (member)
- INTERNATIONAL FEDERATION OF ROBOTICS (IFR) (member)

#### **Other Professional Activities:**

##### **- summer schools, workshops:**

Sept. 23-25, 2004: Workshop „Qualifications Agreement within the European educational process of navigation **QUEENAV 2004**”, Drobeta Turnu Severin, România; organizers: Faculty of Engineering and management of Technological Systems from Drobeta Turnu Severin, Romanian Naval Authority, Romanian Ministry of Transportation (member of the organizing committee)

##### **- European programs:**

1996: TEMPUS PEC 3517 programe at Université d'Artois, Institut Universitaire de Technologie de Béthune, France

2011: POSDRU 57/1.3/S/17884 programe at Universidad Carlos III de Madrid, Spain