

Europass Curriculum Vitae



Personal information

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Dorian Gorgan

Desired employment / Occupational field

Professor in Computer Science,

Computer Science Department, Technical University of Cluj-Napoca PhD Supervisor in Computers and Information Technology, since 2007

Chair of the "Computer Graphics and Interactive Systems" Research Group (CGIS), http://cgis.utcluj.ro, Editor in Chief of the "Romanian Journal of Human-Computer Interaction", http://rochi.utcluj.ro/rrioc,

President of the ACM-SIGCHI RoCHI national organization.

Work experience

1882 - onwards Dates

Occupation or position held Professor (since 1998), Reader (1995-1998), Lecturer (1990-1995), Assistant Professor (1982-1990).

Teaching Computer Science. Courses: Fundamentals on Computer Graphics, Graphical Processing Main activities and responsibilities

Systems, User Interface Design, Interactive Systems, Computer Architectures, Digital System Modeling and Simulation, Microprocessor Based Systems, Digital Computers and Data Processing, and

Computer Programming, Operating Systems and Software Development Methodology.

Technical University of Cluj-Napoca Name and address of employer

Type of business or sector Computer Science Department

> 2001 - 2003Dates

Occupation or position held Technical and scientifical consultancy in Autodesk Inc, Milan, Italy

Main activities and responsibilities Project Management, Technical and Product Design, and Software Development Methodology in the

domain of Location Based Services (LBS), Geographical Information Systems (GIS), and Wireless

Applications through projects between Autodesk and Fiat, and TIM Italy

Name and address of employer Autodesk Inc

> Type of business or sector Scientific consultancy

> > 1980 - 1982 Dates

Occupation or position held Research engineer

Main activities and responsibilities Software and hardware design in the field of digital circuit testing, and data processing and

communication

Name and address of employer Enterprise for Industrial Electronics and Automation (IEIA) in Cluj-Napoca Type of business or sector Research and computer engineering

Education and training

1996 - 1997 Dates

Title of qualification awarded

Postdoctoral research, ERCIM fellow

Principal subjects/occupational skills covered

Graphical User Interfaces and Multimedia Systems

Name and type of organisation providing education and training Informatics Department, Rutherford Appleton Laboratory (RAL), United Kingdom

Level in national or international classification

European Research Consortium for Informatics and Mathematics (ERCIM)

Dates

1990 - 1994

Title of qualification awarded

Ph.D.

Principal subjects/occupational skills covered Graphical Modeling and Simulation, Visual Programming, and Graphical User Interfaces

Name and type of organisation providing education and training

Technical University of Cluj-Napoca

Level in national or international classification

Doctoral research

Dates

1975 - 1980

Title of qualification awarded

Engineer in Computer Science and Automation

Principal subjects/occupational skills covered

Computer Science and Automation

Name and type of organisation providing education and training

"Politehnica" University of Timisoara

Level in national or international classification

Technical University

Professional abilities and competences

Awards and prizes

"Excellence in Research" award, Technical University of Cluj-Napoca, 2012.

"Best Awareness Level in FP7-ICT Grant Schemes and Current Projects in Software Services", Prague,

Title of "Profesor Visitante Ilustre" of Pontificia Universidad Católica de Valparaíso, 2009.

1st Prize for the First Articulated Mobile Robot controlled by microcomputer (PETRICA), designed and bult in Romania. Bucharest 1980.

Numerous prizes at national and university olympiads in Mathematics, Physics, and Computer Science and Engineering.

Professional organizations

President of the RoCHI organization, ACM SIGCHI in Romania, Chief Editor of the Romanian Journal of Human-Computer Interaction.

Member of IEEE, ACM, IFIP TC13, ICT EU Expert for FP7, CNCSIS Expert.

Visiting Professor and professional

University of Geneva (CH), Pontificia Universidad Católica de Valparaíso (CL), University of Plymouth (UK), University of Exeter (UK), Universita degli Studi di Catania (I), Universita degli Studi di Torino (I), (ERASMUS-SOCRATES Programme), Free University of Amsterdam (NL).

Scientific events

Training and Tutorials:

Giving training and tutorials in the fields of Big Data Processing on High Performance Computation Architectures (HPC) in the fields of Earth Sciences and Earth Observation: Brussels (Belgium), Berlin (Germany), Prague (Czech Rep.), Istanbul (Turkey), Erevan (Armenia), Thessaloniki (Greece), Batumi (Georgia), Sofia (Bulgaria), Novi Sad (Serbia), Rabat (Morocco), Delft (The Nederland), Geneva (Switzerland).

Member in the Review Committee of Journals:

Computer Standards & Interfaces, Journal of Network and Computer Applications Environmental Modelling and Software, Journal of Supercomputing, Computers & Geosciences, Journal on IEEE Transactions on Parallel and Distributed Systems, International Journal of Digital Earth, Romanian Journal of Human Computer Interaction, Hydrology and Earth System Sciences Journal, International Journal of Advanced Computer Science and Applications (IJACSA).

Domains of interest

High performance computation, Cloud and Grid computing, cluster and grid visualization, user interaction techniques, computer graphics, graphical user interfaces, distributed interactive systems, virtual world modeling, Earth Science oriented tools and applications development.

Scientific advice and work experience

Coordination of projects and research in the fields of: distributed interactive systems, grid and cloud computing, high performance computation and visualization, computer graphics, graphical user interfaces, web technologies, geographical information systems (GIS), location based services (LBS), satellite image processing, wireless systems, active object based modeling, virtual world modeling, visual programming, human computer interaction, computer architecture, image processing and pattern recognition, operating systems, spatial databases, computer aided education, distributed learning, fuzzy logic, microprocessor based architectures, computer aided design of electrical circuits, robotics, and programming languages.

University and scientific cooperation

FP7 Projects:

IASON - Fostering sustainability and uptake of research results through Networking activities in Black Sea & Mediterranean areas, http://www.iason-fp7.eu/, Funded by the European Commission (2013 - 2015).

EnviroGRIDS - Building Capacity for a Black Sea Basin Observation and Assessment System supporting Sustainable Development, http://www.envirogrids.net/. Funded by the European Commission (2009 - 2013).

mEducator - Multi-type Content Repurposing and Sharing in Medical Education, http://www.meducator.net/. eContentplus - Digital Content and Cognitive Systems Programme funded by European Commission (2009-2012).

SEE-GRID-SCI - SEE-GRID eInfrastructure for regional eScience, http://www.see-grid-sci.eu/. Funded by the European Commission (2008 - 2010).

Research of Excellence Projects:

BIGEARTH - Flexible processing of big earth data over high performance computing architectures, http://cgis.utclui.ro/projects/bigearth, ROSA STAR project (2013-2016).

PECSA - Experimental Computer Services Platform for Scientific and Entrepreneurial Development, http://cgis.utcluj.ro/pecsa, PN-II-PT-PCCA-2013-4-1976, (2014-2016)

GiSHEO - On demand Grid services for high education and training in Earth observation, http://gisheo.info.uvt.ro/. Funded by European Space Agency through PECS Programme (2008-2010).

MedioGRID - Parallel and distributed graphical processing on GRID structure of geographical and environment data, 19CEEX-I03 (2005-2008).

Socrates Minerva, COST Projects:

KEYSTONE, COST Action IC1302: Semantic keyword-based search on structured data sources, 2013-2017. Member of the Management Committee.

ComplexHPC, COST Action IC0805: Open European Network for High Performance Computing on Complex Environments, 2009-2013. Member of the Management Committee.

I-TRACE - Interactive Tracing and Graphical Annotation in Pen-based e-learning, 223434-CP-I-2005-IT-Minerva-M (2005-2007).

TEMPUS Projects:

S_JEP 11248-96 "ROCOCO" (1996-1999, main proposer and local coordinator in the Technical University of Cluj-Napoca).

IMG-94-RO-1029 (1995), individual mobility to Rutherford Appleton Laboratory (UK).

S_JEP 08337-94 "IARCOD" (1994-1997, local coordinator in the Technical University of Cluj-Napoca).

Publications

More than 19 books and more than 340 papers and presentations in the fields of high performance computation, computer graphics, interactive systems, graphical user interface, computer architectures, and computer programming languages.

Papers (20 selected papers)

- 1. Nandra C., Gorgan G., Defining Earth Data Batch Processing Tasks by Means of a Flexible Workflow Description Language, *ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Volume III-4*, pp.59-66, (2016).
- Gorgan D., Catana M.C., Stefanut T., Visual analytics on multidimensional massive data (Tehnici vizuale de analiza a datelor masive multidimensionale). Revista Romana de Interactiune Om-Calculator, Vol.8(3), pp.237-255, (2015).
- 3. Rodila D.D., Ray N., Gorgan D., Conceptual Model for Environmental Science Applications on Parallel and Distributed Infrastructures, *Journal of Environmental Systems Research*, *4*:23, ISSN: 2193-2697, http://www.environmentalsystemsresearch.com/content/4/1/23, (2015).
- 4. Lehmann A., Giuliani G., Mancosu E., Abbaspour K.C., Sözen S., Gorgan D., Beel A., Ray R., 2014. Filling the gap between Earth observation and policy making in the Black Sea catchment with enviroGRIDS. *Environmental Science and Policy*, Vol.46, pp.1-12, (2015).
- 5. Bacu V., Stefanut T., Gorgan D., Adaptive Processing of Earth Observation Data on Cloud Infrastructures Based on Workflow Description. Proceedings of the Intelligent Computer Communication and Processing (ICCP), IEEE-Press, pp.449-454, (2015).
- 6. Sabou, A., Gorgan, D., A Parallel, Distributed, High-Performance Architecture for Simulating Particle-Based Models. In Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), IEEE 16th International Symposium on, pp.500-507, (2014).
- 7. Gorgan, D., Spatial data processing on high performance computation architectures. In Proceedings of the ACM 7th Euro American Conference on Telematics and Information Systems, Valparaiso, Chile, pp.1-4, (2014).
- 8. Gorgan D., Mihon D., Bacu V., Rodila D., Stefanut T., Colceriu V., Allenbach K., Balcik F., Giuliani G., Ray N., Lehmann A., *Flexible Description of Earth Data Processing over HPC Architectures*, Big Data From Space Symposium, Frascati, Italy, 5-7 June, Abstract Book, pp. 39 (2013).
- 9. Gorgan D., Giuliani G., Ray N., Cau P., Abbaspour K., Charvat K., Jonoski A., Lehmann A., Black Sea Catchment Observation System as a Portal for GEOSS Community, in *International Journal of Advanced Computer Science and Applications* (IJACSA), pp.9-18, (2013).
- 10. Mihon D., Colceriu V., Bacu V., Allenbachand K., Rodila D., Giuliani G., Gorgan D., OGC Compliant Services for Remote Sensing Processing over the Grid Infrastructure, in *International Journal of Advanced Computer Science and Applications* (IJACSA), pp.32-40, (2013).
- Bektas Balcik F., Mihon D., Colceriu V., Allenbach K., Goksel C., Dogru A.O., Gvilava M., Giuliani G., Gorgan D., Remotely Sensed Data Processing on Grids by using GreenLand Web-based Platform, in *International Journal of Advanced Computer Science and Applications* (IJACSA), pp.58-65, (2013).
- 12. Colceriu V., Mihon D., Minculescu A., Bacu V., Rodila D., Gorgan D., Workflow Based Description and Distributed Processing of Satellite Images, in *International Journal of Advanced Computer Science and Applications* (IJACSA), pp.50-57, (2013).
- 13. Gorgan D., Bacu V., Stefanut T., Rodila D., Mihon D., Earth Observation application development based on the Grid oriented ESIP satellite image processing platform, *Journal on Computer Standards & Interfaces*, 34, 2012, pp. 541–548, (2012).
- Gorgan D., Bacu V., Mihon D., Rodila D., Abbaspour, K., and Rouholahnejad, E.: Grid based calibration of SWAT hydrological models, *Journal of Nat. Hazards Earth Syst. Sci.*, 12, pp. 2411-2423, (2012).
- Gorgan D., Bacu V., Mihon D., Stefanut T., Rodila D., Cau P., Abbaspour K., Giuliani G., Ray N., Lehmann A., Software platform interoperability throughout enviroGRIDS portal, in International Journal of Selected Topics in Applied Earth Observations and Remote Sensing – JSTARS, Vol. 5/6, pp. 1617-1627, (2012).
- Rodila D., Bacu V., Gorgan D., Comparative Parallel Execution of SWAT Hydrological Model on Multicore and Grid Architecture, *International Journal of Web and Grid Services*, Vol. 8, No. 3, 2012, pp. 304-320, (2012).

- 17. Gorgan D., Bacu V., Mihon D., Rodila D., Stefanut T., Abbaspour K., Cau P., Giuliani G., Ray N., Lehmann A., Spatial Data Processing Tools and Applications for Black Sea Catchment Region. *International Journal of Computing*, Vol.11 (4), pp. 327-335. (2012).
- 18. Rodila D., Gorgan D., Geospatial and Grid Interoperability through OGC Services Gridification, in *International Journal of Selected Topics in Applied Earth Observations and Remote Sensing JSTARS*, Vol. 5/6, pp. 1650-1658, (2012).
- Mihon D., Bacu V., Rodila D., Stefanut T., Abbaspour K., Rouholahnejad E., Gorgan D., Grid Based Hydrologic Model Calibration and Execution. Chapter in the book: *Advanced in Intelligent Control Systems and Computer Science*, Dumitrache I. (Ed.), Springer-Verlag, Volume 187, 2012, pp 279-293. (2012).
- Gorgan D., Bacu V., Rodila D., Pop P., Petcu D., Experiments on ESIP Environment Oriented Satellite Data Processing Platform, in *Earth Science Informatics Journal*, Springer, Vol.3/4, December 2010, pp. 297-308, (2010).

Books (7 selected books)

- 1. Cali A., Gorgan D., Ugarte M. (Eds.), Semantic Keyword-Based Search on Structured Data Sources, Springer Int. Pub., ISBN 978-3-319-53639-2, 197 p., 2017.
- Ştefănuţ T., Mihon D., Bâcu V., Gorgan G., Proiectarea interfeţelor utilizator Îndrumător de laborator, Editura U.T. PRESS Cluj-Napoca, ISBN 978-606-737-068-3, http://biblioteca.utcluj.ro/, 2015.
- Bâcu V., Ştefănuţ T., Mihon D., Gorgan D., Elements of computer assisted graphics Laboratory works, Editura U.T. PRESS Cluj-Napoca, ISBN 978-606-737-058-4, http://biblioteca.utcluj.ro/, 2015.
- 4. Giuliani G., Gorgan D. (Eds.), *EnviroGRIDS Special Issue on "Building a Regional Observation System in the Black Sea Catchment"*. Special issue of International Journal of Advanced Computer Science and Applications (IJACSA), ISSN 2158-107X, 2013, pp. 99.
- 5. Gorgan D., Melenti C. (ed), *Prelucrarea grafica paralela si distribuita pe structura grid a datelor geografice si de mediu, vol* 2 (engl. Parallel and distributed graphical processing on Grid structure of geographic and environment data), ISBN: 978-973-713-092-1, Ed Mediamira, 2006, pp. 232.
- 6. Gorgan D., Melenti C. (ed), *Prelucrarea grafica paralela si distribuita pe structura grid a datelor geografice si de mediu*, vol 1 (engl. Parallel and distributed graphical processing on Grid structure of geographic and environment data), ISBN: 978-973-713-091-4, Ed Mediamira, 2005, pp. 253.
- 7. Gorgan D., Sebestyen G, *Proiectarea Calculatoarelor* (engl. Computer Design), ISBN 973-650-123-X. (Reviewed and enhanced version of the book Structura Calculatoarelor, published in 2000 and 2003). Editura Albastra, Clui-Napoca, Romania, 2005. pp 418.

Personal skills and competences

Mother tongue(s)
Other language(s)
Self-assessment
European level (*)
English
Italian
French

Romanian

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user
C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user	B1	Advanced user
B1	Advanced user	B1	Advanced user	A2	Basic user	A2	Basic user	A2	Basic user

(*) Common European Framework of Reference for Languages