Europass Curriculum Vitae

Personal information

First name(s) / Surname(s)	**Dorian GORGAN**
Telephone(s)	
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Home page	http://users.utcluj.ro/~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 "International Journal of User-System Interaction (IJUSI)", https://rochi.utcluj.ro/ijusi/

Work experience

Dates	1982 - onwards
Occupation or position held	Professor (since 1998), Reader (1995-1998), Lecturer (1990-1995), Assistant Professor (1982-1990).
Main activities and responsibilities	Teaching Computer Science. Courses: Fundamentals on Computer Graphics, Graphical Processing Systems, User Interface Design, Interactive Systems, Virtual Reality, Computer Architectures, Digital System Modeling and Simulation, Microprocessor Based Systems, Digital Computers and Data Processing, and Computer Programming, Operating Systems and Software Development Methodology.
Name and address of employer	Technical University of Cluj-Napoca
Type of business or sector	Computer Science Department
Dates	2001 – 2003
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
Dates	1980 - 1982
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

Dates	1996 - 1997
Title of qualification awarded	Postdoctoral research, ERCIM fellow
Principal subjects/occupational skills covered	Graphical User Interfaces and Multimedia Systems, Supervised by Prof. David A. Duce.
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, Coodinated by Prof. Dan Comsa in the domain of Technical Engineering.
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, Graduate project: "First Mobile Articulated Robot Controlled by a Microcomputer (PETRICA)"
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	"Team of the Year Award" for the development of the Black Sea SWAT model. Warsaw, Poland, 2017.
	"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, 2011.
	Title of "Profesor Visitante Ilustre" of Pontificia Universidad Católica de Valparaíso, 2009.
	1st Prize for the First Mobile Articulated Robot Controlled by Microcomputer (PETRICA), designed and developed 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 (2008-2018), Chief Editor of the International Journal of User-Systems Interaction (IJUSI), since 2019.
	Member of IEEE, ACM, IFIP TC13, ICT EU Expert for FP7, CNATDCU Expert.
Visiting Professor and professional visits	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), University of Geneva (CH), National Academy of Sciences of Armenia (NAS RA), University of Limerick (RI).
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 (Springer), Computers & Geosciences, Journal on IEEE Transactions on Parallel and Distributed Systems, International Journal of Digital Earth, International Journal of User-System Interaction, Romanian Journal of Human Computer Interaction, Hydrology and Earth System Sciences Journal, International Journal of Advanced Computer Science and Applications (IJACSA), Journal of Frontiers in Education, Journal of Hydroinformatics, Journal of Remote Sensing (MDPI).

Domains of interest	High performance computation, Cloud and distributed computing, graphics processing and visualization, user interaction techniques, computer graphics, graphical user interfaces, distributed interactive systems, virtual world modeling, Earth Science and Earth Observation oriented tools and applications development, massive spatial data processing and visualization.
Scientific advice and work experience	Coordination of projects and research in the fields of: AI techniques in ES and EO domains, remote sensing, 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	Institutional Development Projects:

HRIA - Romanian HUB of Artificial Intelligence (HUB Român de Inteligență Artificială), Project code 334906, Smart Growth, Digitalization and Financial Instruments Programme 2021-2027 (PoCIDIF), funded by the European Regional Development Fund (ERDF), SMIS code: 334906 (2025-2029)..

TDIH - Transilvania Digital Innovation Hub, Project code 101083508 TDIH, DIGITAL-2021-EDIH-01. Project co-financed by the European Commission under the Digital Europe Programme (2022-2025)..

CLOUDUT - Cloud Cercetare UTCN-CLOUDUT, Project type: CLOUD and Massive Data Infrastructures, Competitiveness Operational Program 2014-2020, Contract 235/2020 (2020 - 2022).

AITECH - Cercetare de excelență în domeniul inteligență artificială și date masive (Research of excellence in the field of artificial intelligence and massive data), Tip proiect: PNCDI III, Proiecte de finanţare a excelenţei în CDI, Contract 38 PFE/2021 (2021-2024).

International Projects:

ChemiNova - Novel technologies for on-site and remote collaborative enriched monitoring to detect structural and chemical damages in cultural heritage assets. HORIZON-RIA, Funded by the European Commission (2024-2027).

GOLDENRAM - EO Platform supporting critical raw materials industry in Europe. HORIZON Europe, Funded by the European Commission (2024-2026).

DTM4HEVs - Development of VR/AR Assisted Digital Training Materials for Hybrid and Electric Vehicles, Erasmus+ project, nr. 2023-1-TR01-KA220-VET-000152218, http://www.vrforev.org, (2024-2025).

EMPOWER - Design and evaluation of technological support tools to empower stakeholders in digital education, HORIZON-RIA, Funded by the European Commission (2022-2025).

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:

CERES - Software module for machine learning based classification of asteroids from satellite images (Modul software de clasificare a asteroizilor din imagini astronomice utilizând învățare automată), PN-III project, EUFISCSD (2020-2022).

HORUS – Software Toolbox for Pedological Monitoring of Transylvanian Area based on Sentinel-2 Data, http://cgis.utcluj.ro/horus, ROSA STAR project (2017-2019).

NEARBY - Visual Analysis of Multidimensional Astrophysics Data for Moving Objects Detection, http://cgis.utcluj.ro/nearby, ROSA STAR project (2017-2019).

BIGEARTH - Flexible processing of big earth data over high performance computing architectures, http://cgis.utcluj.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 20 books and more than 400 papers and presentations in the fields of high performance computation, remote sensing, computer graphics, interactive systems, graphical user interface, computer architectures, and computer programming languages.
Papers (20 selected papers)	1. Bacu V, Nandra C, Sabou A, Stefanut T, Gorgan D., Assessment of Asteroid Classification Using Deep Convolutional Neural Networks. *Aerospace. 2023*; 10(9):752
	2. Dumitru R.G., Gorgan D., 3D Object Recognition using Enhanced Slicing. Proceedings of the 2023 *IEEE 19th International Conference on Intelligent Computer Communication and Processing (ICCP)*, (2023).
	3. Gorgan, D., High Performance Computing Infrastructure in Technical University Research. In 2022 *IEEE 18th International Conference on Intelligent Computer Communication and Processing (ICCP)*, pp. 263-271), (2022).
	4. Nandra C., Grigor S., Gorgan D., Integrating Voice Based Interaction with Massive Data Process Description and Execution. In: Russo D., Ahram T., Karwowski W., Di Bucchianico G., Taiar R. (eds) Intelligent Human Systems Integration 2021. IHSI 2021. *Advances in Intelligent Systems and Computing, vol 1322. Springer, Cham*, pp.133-139, (2021).

5. Margin R., Gorgan D., Qualitative Classification of Local Satellite Data. Proceedings of the *2020 IEEE ICCP - 16th International Conference on the Intelligent Computer Communication and Processing*, ISBN:978-1-7281-9081-5, pp.589-596, (2020).

6. Gorgan D., Vaduvescu O., Stefanut T., Bacu V., Sabou A., Copandean D., Nandra C., Boldea C., Boldea A., Predatu M., Pinter V., Stanica A., Nearby Platform for Automatic Asteroids Detection and Euronear Surveys. *Proc. 1st NEO and Debris Detection Conference, Darmstadt, Germany, 22-24 January 2019, published by the ESA Space Safety Programme Office Ed. T. Flohrer, R. Jehn, F. Schmitz*, (2019).

7. Bacu V., Stefanut T., Gorgan D., Building soil classification maps using HorusApp and Sentinel-2 Products. *Proceedings of the 2019 IEEE 15th International Conference on the Intelligent Computer Communication and Processing (ICCP)*, ISBN: 978-1-7281-4914-1, pp.79-85, (2019).

8. Bica M., Gorgan D., Data Locality Aware Algorithm for Task Execution on Distributed, Cloud Based Environments. In: Barolli L., Terzo O. (eds) Complex, Intelligent, and Software Intensive Systems. CISIS 2017. *Advances in Intelligent Systems and Computing book series, vol. 611, Springer*, pp.557-566, (2018).

9. 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).

10. 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, (2015).

11. 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).

12. 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).

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).

14. 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).

15. 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).

16. 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).

19. 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).

20. 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 (5 selected books)

1. Arslan R., Kus A., Dimitrov L., Gorgan D., (Eds.), "Hybrid & Electric Vehicles Technology. Principles, Electronics, Diagnostic". EKIN Publishing House, ISBN 978-625-5661-99-9, 210 p., 2025.

2. 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.

3. Bâcu V., Ștefănuț 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., 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, Cluj-Napoca, Romania, 2005. pp 418.

Personal skills and competences

Mother tongue(s)

Romanian

Other language(s)

Self-assessment

European level (*)

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

English
Italian
French

(*) Common European Framework of Reference for Languages

Dorian Gorgan, Prof.Dr.Eng.