



## INFORMATII PERSONALE

Nume

**DORIAN GORGAN**

Telefon/ Fax

E-mail

dorian.gorgan@cs.utcluj.ro

Pagina Web

<http://users.utcluj.ro/~gorgan>

## PROFESIA / OCUPATIA ACTUALA

Pozitia

Professor in Stiinta Calculatoarelor si Tehnologia Informatiei  
 Conducator de doctorat in domeniul Calculatoare si Tehnologia Informatiei.  
 Coordonator al Laboratorului de cercetare Grafica pe Calculator si Sisteme Interactive (CGIS),  
<http://cgis.utcluj.ro>

Loc de munca

Departamentul Calculatoare, Universitatea Tehnica din Cluj-Napoca

Profesia

Inginer, Specializarea Automatizari și Calculatoare

Activitate principala

Activitati didactice și de cercetare

Conducator de doctorat

Domeniul Calculatoare și Tehnologia Informatiei

## EDUCATIE ȘI STUDII

Perioada

1996 - 1997

Numele si tipul institutiei

Informatics Department, Rutherford Appleton Laboratory (RAL), UK

Domeniul de studiu

Cercetare postdoctorat cu Prof. David Duce in Departamentul Informatica, Institutul de cercetari Rutherford Appleton Laboratory, UK, in domeniul Interfete utilizator grafice si Sisteme multimedia.

Tipul calificarii/Diploma obtinuta

Bursier la European Research Consortium for Informatics and Mathematics (ERCIM), cercetare postdoctorat

Specializarea

Interfete utilizator grafice si Sisteme multimedia

Perioada

1990 - 1994

Numele si tipul institutiei

Universitatea Tehnica din Cluj-Napoca

Domeniul de studiu

Cercetare doctorala in domeniul Modelare si simulare grafica, Programare vizuala și Interfete utilizator grafice. Coordonator Prof. Dan Comsa in domeniul Inginerie Tehnica.

Tipul calificarii/Diploma obtinuta

Doctor inginer (1994)

Specializarea

Programare vizuala și Interfete utilizator grafice

Perioada

1975 - 1980

Numele si tipul institutiei

Universitatea „Politehnica” din Timisoara, Facultatea de Automatica și Calculatoare

Domeniul de studiu

Student. Proiect de diploma: „Primul robot mobil articulat controlat de un microcalculator (PETRICA)”

Tipul calificarii/Diploma obtinuta

Inginer in Automatizari și Calculatoare (1980)

Specializarea

Automatizari si calculatoare

## EXPERIENTA PROFESIONALA

Perioada

1982 – in prezent

Functia sau pozitia ocupata

Profesor (din 1998), Conferentiar (1995-1998), Sef de lucrari (1990-1995), Asistent universitar (1983-1990), Inginer cercetator (1982-1983)

Numele si adresa angajatorului	Universitatea Tehnica din Cluj-Napoca, Departamentul Calculatoare
Tipul activitatii sau departamentul	Activitati educationale si de cercetare in Stiinta Calculatoarelor si Tehnologia Informatiei
	Titularul cursurilor: Computer aided graphics (2cs) Grafica asistata de calculator (2cti) Graphic processing (3cs) Prelucrare grafica (3cti) User interface design (4cs2) Sisteme interactive (m1) Realitate virtuala (m2)
Perioada	2001 – 2003
Functia sau pozitia ocupata	Management proiecte, Proiectare tehnica a produselor, Metodologia de dezvoltare software in domeniul Location Based Services (LBS), Geographical Information Systems (GIS) si, Wireless Applications in proiecte ale Autodesk si Fiat (Alfaromeo) si, TIM Italy.
Numele si adresa angajatorului	Autodesk Inc.
Tipul activitatii sau departamentul	Consultanta stiintifica si tehnica
Perioada	1980 - 1982
Functia sau pozitia ocupata	Inginer cercetator in domeniul proiectarii software si hardware
Numele si adresa angajatorului	Intreprinderea pentru Electronica Industriala si Automatizare (IEIA), Cluj-Napoca, Universitatea Tehnica din Cluj-Napoca
Tipul activitatii sau departamentul	Testarea circuitelor digitale si, prelucrarea si comunicarea datelor
<b>ACTIVITATE STIINTIFICA</b>	
Domenii stiintifice de interes	Arhitecturi HPC (High Performance Computation), prelucrare si vizualizare grafica, tehnici de interactiune om-calculator, interfete utilizator grafice, aplicatii interactive distribuite, dezvoltarea aplicatiilor si platformelor software in domeniul Earth Science si Earth Observation, realitate virtuala, realitate imbunatatita, prelucrarea si vizualizarea datelor spatiale masive.
Training si tutoriale	Activitati de training si tutoriale in domeniul Prelucrari pe Arhitecturi de Calcul de Inalta Performanta (HPC) in Earth Science si Earth Observations: 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).
Publicatii (Total, din care 20 lucrari reprezentative publicate in jurnale)	<ol style="list-style-type: none"> <li>1. 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. <i>Advances in Intelligent Systems and Computing</i>, vol 1322. Springer, Cham, pp.133-139, (2021).</li> <li>2. 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).</li> <li>3. 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. <i>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</i>, (2019).</li> <li>4. Bacu V., Stefanut T., Gorgan D., Building soil classification maps using HorusApp and Sentinel-2 Products. <i>Proceedings of the 2019 IEEE 15th International Conference on the Intelligent Computer Communication and Processing (ICCP)</i>, ISBN: 978-1-7281-4914-1, pp.79-85, (2019).</li> <li>5. 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. <i>Advances in Intelligent Systems and Computing book series</i>, vol. 611, Springer, pp.557-566. (2018).</li> <li>6. Colceriu V.D., Stefanut T., Bacu V., Gorgan D., Annotation and Position Recall from Low Grade Sensorial Data in the Context of Topological Railway Maps. <i>Journal of Studies in Informatics and Control, Special Issue on Advanced Services in Heterogeneous Distributed Systems</i>, Vol.26(4), pp. 469-480, (2017).</li> <li>7. Bica M., Gorgan D., Data Locality Aware Algorithm for Task Execution on Distributed, Cloud Based Environments. In <i>Advances in Intelligent Systems and Computing</i>, Vol.611, pp.557-566, (2017).</li> </ol>

8. Bacu V., Nandra C., Stefanut T., Gorgan D., SWAT model calibration over Cloud infrastructures using the BigEarth platform. *Proceedings of the Intelligent Computer Communication and Processing (ICCP)*, IEEE-Press, in press, (2017).
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).

Carti (selectie de 5 publicatii)

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.
2. Ștefănuț T., Mihon D., Băcu V., Gorgan G., *Proiectarea interfețelor utilizator - Îndrumător de laborator*, Editura U.T. PRESS Cluj-Napoca, ISBN 978-606-737-068-3, <http://biblioteca.utcluj.ro/>, 2015.
3. Băcu 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 Alabastra, Cluj-Napoca, Romania, 2005. pp 418.

Granturi, contracte de cercetare  
(Contracte reprezentative)

Proiecte de dezvoltare la nivel instituțional:

**AITECH** - Cercetare de excelență în domeniul inteligență artificială și date masive, Tip proiect: PNCDI III, Proiecte de finanțare a excelenței în CDI, Contract 38 PFE/2021 (2021-2024)

**CLOUDUT** - Proiect "Cloud Cercetare UTCN-CLOUDUT", Tip proiect: Proiecte de tip CLOUD si de Infrastructuri masive de date, Programul Operational Competitivitate (POC) 2014-2020, Contract 235/2020 (2020 - 2022).

Proiecte FP7:

**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).

Proiecte de cercetare de excelenta:

**NEARBY** – Tehnici de analiză vizuală a datelor astrofizice multidimensionale pentru detecția obiectelor în mișcare, <http://cgis.utcluj.ro/projects/nearby>, ROSA STAR project (2017-2019).

**HORUS** – Platformă software pentru monitorizare pedologică în zona Transilvaniei bazată pe date Sentinel-2, <http://cgis.utcluj.ro/projects/horus>, 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).

Proiecte Socrates Minerva:

**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).

Proiecte TEMPUS:

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).

**ABILITATI PROFESIONALE SI  
COMPETENTE**

Premii si distinctii	<p>Premiul "Excelenta in cercetare", Universitatea Tehnica din Cluj-Napoca, 2012.</p> <p>Premiul "Best Awareness Level in FP7-ICT Grant Schemes and Current Projects in Software Services", Praga, 2011</p> <p>Titlul "Profesor Visitante Ilustre" la Pontificia Universidad Católica de Valparaíso, 2009.</p> <p>Premiul I national, pentru Primul Robot Mobil Articulat Controlat de un Microcalculator (PETRICA), proiectat si construit in Romania. Bucuresti 1980.</p> <p>Numeroase premii la olimpiade nationale si universitare la Matematica, Fizica si, Stiinta si Ingineria Calculatoarelor.</p>
Organizatii profesionale	<p>Membru IEEE, ACM, ACM ROCHI, IFIP Working Group 13, ICT EC Expert, UEFISCDI Expert</p> <p>Presedintele organizatiei nationale ACM RoCHI Romania (SIGCHI Chapter Romania)</p> <p>Editor sef al revistei International Journal of User-Systems Interaction (IJUSI), (incepand cu 2019)</p> <p>Editor sef al revistei Revista Romana de Interactiune Om-Calculator (2008-2018)</p> <p>Specialist în Comisia 4-Tehnologia informației și comunicațiilor, spațiu și securitate a Colegiului Consultativ pentru Cercetare-Dezvoltare și Inovare (CCCDI) din Ministerul Cercetării, Inovării și Digitalizării (MCID), (incapand cu 2021)</p> <p>Coordonator Consiliul de coordonare a programelor doctorale Automatica si Calculatoare (2020-2025)</p> <p>Membru în Comisia de calculatoare, tehnologia informației și ingineria sistemelor a Consiliului National de Atestare a Titlurilor, Diplomelor si Certificatelor Universitare – CNATDCU (2017-2024)</p> <p>Membru al Senatului UTCN (2012-2016)</p> <p>Membru în Consiliul Profesoral al Facultății de Automatică și Calculatoare din UTCN</p>
Vizite profesionale	<p>Pontificia Universidad Católica de Valparaíso (CL), University of Plymouth (UK), University of Exeter (UK), Università degli Studi di Catania (I), Università 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).</p>
Competenta si experienta in activitatea stiintifica	<p>Membru in Comitetele de Recenzie ale unor Jurnale: Computer Standards &amp; Interfaces, Journal of Network and Computer Applications Environmental Modelling and Software, Journal of Supercomputing (Springer), Computers &amp; 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).</p> <p>Coordonarea proiectelor de cercetare in domeniile: 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.</p>
Limbi straine cunoscute	<p>Engleza: foarte bine</p> <p>Italiana: foarte bine</p> <p>Franceza: bine</p>

Cluj-Napoca  
15/01/2022

Prof.dr.ing. Dorian GORGAN