

CV Year	2019
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Part A. PERSONAL INFORMATION

First and Family name	Fatos Xhafa		
Social Security, Passport, ID number	Spanish		
Researcher numbers	Researcher ID	RID: B-8869-2012	
	Orcid code	0000-0001-6569-5497	

A.1. Current position

Name of University/Institution	Universitat Politècnica de Catalunya (UPC)		
Department	Department of Computer Science		
Address and Country	Departament de Ciències de Computació Universitat Politècnica de Catalunya (BarcelonaTech) The School of Industrial, Aeronautical and Audiovisual Engineering of Terrassa (ESEIAAT) Carrer de Colom, 11, 08222 Terrassa, Barcelona, SPAIN		
Phone number	+34 93 739 8090	E-mail	fatos@cs.upc.edu
Current position	<i>Profesor Catedrático de Universidad (Full Professor)</i>		
UNESCO specialization codes	Computer Technologies (3304 TECNOLOGÍA DE LOS ORDENADORES, 120326 SIMULACION, 120325 DISEÑO DE SISTEMAS SENSORES, 1207 INVESTIGACIÓN OPERATIVA, 120703 CIBERNETICA)		
Keywords	Distributed Computing, Massive Data Processing and Analysis, Optimization, Heuristics, Simulation, Data Analysis, IoT, Networking and Collective Intelligence, Data Mining and Machine Learning		

A.2. Education

Degree	University	Year
Graduated in Mathematics (<i>Licenciado en Matemáticas</i>)	University of Tirana, Albania. Homologated to Spanish Degree by MECED, España	1988 (1995)
PhD in Computer Science	Universitat Politècnica de Catalunya	1998

A.3. JCR articles, Indices, ...

- Articles in JCR-indexed journals: 95 (Q1: 23; Q2: 46; Q3+Q4: 26)
- Scopus Author h-index = 35
- Web of Science: h-index = 28
- Google Scholar: h-index = 48; i10-index = 251
- Included in the ranking of top Spanish scientists
- Classified 1st UPC author in the Scopus ranking for all the authors of the UPC, according to entries indexed in Scopus.



Part B. CV SUMMARY (max. 3500 characters, including spaces)

Dr. Fatos Xhafa is *Profesor Catedrático de Universidad Politécnica de Catalunya (Full Professor)*. Since the completion of the doctoral thesis in 1998 until now, my research activity has been increasing by covering all the possible fields of research activity. The main axis of my research activity has been the research of subjects of the domain of parallel and distributed computing, but always with the concern of updating, looking for new research challenges and researching on emerging research topics: Grid, P2P computing, Cloud computing, Big Data / Big Data Streams, Secure and Trustworthy Computing, Wireless Mesh Networks, Mobile Computing, Ad hoc Mesh Networks or other paradigms. Not less importantly has been the application of the results in concrete real life problems such as online learning domain, eHealth, smart cities, etc.

As a result, I have achieved research results in accordance with international standards, widely referenced, with a high impact index. I have done three long research stays abroad: six months (September 2019-February 2020) at the University of Surrey (Department of Computer Science), UK, one year (September 2009-July 2010) at the University of London (Department of Computer Science and Information Systems, Birkbeck College) and a third one of six months (Sept.2004 - Feb.2005) at the Drexel University in the United States. I have been short term Visiting Professor at Instituto Superiore Mario Boella, Politecnico di Torino, Italy, (November 2013) and have done more than 20 short visits at International Universities and Research Centers. I have collaborated/collaborate with more than 10 research groups from around the world and is member of many important scientific organizations such as IEEE Communications Society, IEEE Systems, Man & Cybernetics Society, Cloud Computing Special Technical Community, Task Force on Ambient Intelligence in IEEE CIS ETTC. I am a founding member of IEEE Communications Society Emerging Technical Subcommittees of Internet of Things. My stays at the University of Surrey and at the University of London were carried out with a sabbatical license / special licence from UPC and supported by the Ministry of Science and Innovation, mobility program of Spanish senior professors and researchers in foreign centers, CALLS 2009 and 2019 (PROGRAM "SALVADOR DE MADARIAGA"). This mobility program is recognised for being very competitive.

I have participated in about 20 research projects and have an ample activity as research expert evaluator of many research agencies and bodies, have participated in many PhD Review/commission in Spain, EU, Australia, Canada, etc.

I am actively participating in editorial services as Editor in Chief of international journals and international book series.

Editor-in-Chief of three International Peer-reviewed Scientific Journals:

1. Internet of Things; Engineering Cyber Physical Human Systems, Elsevier
2. International Journal of Grid and Utility Computing, Inderscience Pub.
3. International Journal of Space-Based and Situated Computing (Honorary Editor), Inderscience Pub.

Editor-in-Chief of two Book Series:

1. *Intelligent Data-Centric Systems: Sensor Collected Intelligence*, Elsevier
2. *Lecture Notes in Data Engineering and Communications Technologies*, Springer.

Guest Editor of 50+ special issues of International peer-reviewed Journals (35 special issues in JCR Indexed journals).

I have participated / participate in editorial board of major indexed international JCR journals (Applied Soft computing (Q1, 2014-2015), Journal of Systems and Software (Q1, 2009-2012), Simulation Modelling Practice and Theory (Q1, 2009-2012), International Journal of Computer Supported Collaborative Learning (Q1, 2004-2011), SoftComputing (Q2), Computers and electrical engineering (Q2), Ambient Intelligence and Humanized Computing (Q3)). I have edited 35 special issues in JCR journals and have edited 25 books of international circulation.

Part C. RELEVANT MERITS

C.1. Publications (a selection, including books)

A comprehensive list of publications with pre-prints can be found at the [UPC Portal FUTUR](#)

- Beneicke, J.; Juan, A.; **Xhafa, F.**; Lopez, D.; Freixes, A. (2018): "Empowering Citizens' Cognition and Decision Making in Smart Sustainable Cities". IEEE Consumer Electronics Magazine, 2020.
- Xu An Wang, Fatos **Xhafa**, Jianfeng Ma, Leonard Barolli, Yunlong Ge PRE⁺: dual of proxy re encryption for secure cloud data sharing service. **IJWGS 14(1)**: 44-69(2018)
- Václav Snásel, Jana Nowaková, Fatos **Xhafa**, Leonard Barolli: Geometrical and topological approaches to Big Data. **Future Generation Comp. Syst.** 67: 286-296 (2017)
- Fatos **Xhafa**, Adriana Bogza, Santi Caballé: Performance Evaluation of Mahout Clustering Algorithms Using a Twitter Streaming Dataset. **AINA 2017**: 1019-1026
- Jorge Miguel, Santi Caballé, Fatos **Xhafa**, Josep Prieto, Leonard Barolli: A methodological approach for trustworthiness assessment and prediction in mobile online collaborative learning. **Computer Standards & Interfaces** 44: 122-136 (2016)
- Fatos **Xhafa**, Christian Sánchez, Admir Barolli, Makoto Takizawa: Solving mesh router nodes placement problem in Wireless Mesh Networks by Tabu Search algorithm. **J. Comput. Syst. Sci.** 81(8): 1417-1428 (2015)
- Fatos **Xhafa**, Junzi Sun, Admir Barolli, Aleksander Biberaj, Leonard Barolli: Genetic algorithms for satellite scheduling problems. **Mobile Information Systems** 8(4): 351-377 (2012)
- Fatos **Xhafa**, Christian Sánchez, Leonard Barolli: Local search methods for efficient router nodes placement in wireless mesh networks. **J. Intelligent Manufacturing** 23(4): 1293-1303(2012)
- Fatos **Xhafa**, Sabri Pllana, Leonard Barolli, Evjola Spaho: Grid and P2P middleware for wide-area parallel processing. **Concurrency and Computation: Practice and Experience** 23(5): 458-476 (2011)
- Fatos **Xhafa**, Xavier Herrero, Admir Barolli, Makoto Takizawa. A Hill Climbing Algorithm for Ground Station Scheduling. In **Information Technology Convergence**, Volume 253 of the Springer series Lecture Notes in Electrical Engineering pp 131-139, 2013
- Biba, M.; **Xhafa, F.** Learning structure and schemas from heterogeneous domains in networked systems surveyed. Springer Series Studies in computational intelligence, vol. 375, pp. 1-16, 2011
- **Xhafa, Fatos**, Fang-Yie Leu Li-Ling Hung (Eds). **Smart Sensors Networks. Communication Technologies and Intelligent Application**, Academic Press, 2017
- Ciprian Dobre, Fatos **Xhafa**. Pervasive Computing: Next Generation Platforms for Intelligent Data Collection, Morgan Kaufmann Publishers, 2016
- Fatos **Xhafa**: **Transactions on Computational Collective Intelligence XIX**. Lecture Notes in Computer Science 9380, Springer 2015, ISBN 978-3-662-49016-7
- **Xhafa, Fatos**, Barolli, Leonard, Barolli, Admir: **Modelling and Processing for Next Generation Big Data Technologies: With Applications and Case Studies**, Springer Series "Modeling and Optimization in Science & Technology", 2014
- **Xhafa, Fatos**, Bessis, Nik (Eds.) **Inter-cooperative Collective Intelligence: Techniques and Applications** Series: Studies in Computational Intelligence, Vol. 495, 2014, Springer
- Bessis, N., **Xhafa, F.**, Varvarigou, D., Hill, R., Li, M. (Eds.). **Internet of Things and Inter-cooperative Computational Technologies for Collective Intelligence**. Series: Studies in Computational Intelligence, Vol. 460, 2013

C.2. Research projects and grants

- Modelos y métodos computacionales para datos masivos estructurados, MINECO, TIN2013-46181-C2-1-R; 2015-01/2017-12;260.151€, PI: F.Orejas,15 membres UPC
- Algorithmic principles for building efficient Overlay computers (AEOLUS), EU, FET15964, 2005-09/2010-02, 280.000€, PI: Ch.Kaklamanis. 7 membres UPC
- Autoorganización en Sistemas de Comunicación Emergentes, MEC,TIN2005-09198-C02- 02, 2006-01/2009-03, 63.070€, PI: A.Fernández, 5 membres UPC
- Métodos formales y algoritmos para el diseño de sistemas (FORMALISM), MEC, TIN2007-66523, 2007-01/2012-12, 821.000€, PI: F.Orejas.
- VMT Project. National Science Foundation (NSF), USA. IERI Grant #0325447, 2003-2008. PI: Gerry Stahl, Drexel University, USA. 2400000\$

C.3 Conference organization and program committee membership

- Steering Committee Co-chair, General Co-Chair and PC-Co Chair for several int'l conferences, symposiums/workshops
- Program Committee member in int'l conferences and workshops
- Organizer of three international conferences at UPC / Barcelona
- Proceedings Editor with IEEE, Springer.

C.4. Other

- Distinguished Guest Professor, Hubei University of Technology, 2016-2018
- 11 plenary conferences at international conferences
- 26 invited lectures / seminars of research in international institutions,
- 20 visits to universities / international research institutes.
- Established international cooperation with various international universites (for both research programs and Erasmus+)
- Scientific Evaluator:
 - Agencia Nacional de Evaluación y Prospectiva, 2014-2015.
 - Italian National Agency for the Evaluation of Universities and Research Institutes (ANVUR)
 - Slovenian Research Agency Funding, 2018
 - Mitacs Accelerate research proposals, Canada, 2018
 - Fund for Scientific Research-FNRS, Belgium, 2017-2018
 - ENGINEERING 2 Study Group, FONDECYT-CHILE, 2017.
 - Horizon 2020 Pillar: Societal Challenges/Work Programme H2020-2016-2017
 - Comisión de Evaluación Proyectos EXPLORA 2015
 - ARC-Australian Research Council, 2013-2017
 - iwT-IBBT/140665 iMinds projects, Belgium, 2014
 - Vienna Science and Technology Fund, 2012