Curriculum Vitae

Carlo Mastroianni

Cosenza, Italy, May 2024

Carlo Mastroianni is a Director of Research at the Institute of High Performance Computing and Networks of the Italian National Research Council (ICAR-CNR), Cosenza, Italy, since January 2021. Previously, he was a Researcher and Senior Researcher at the same Institute.

He received his Ph.D. in Computer Engineering from the University of Calabria in 1999 and the Master Degree in Computer Engineering in 1995 from the same university.

He lectures Quantum Computing at the Master's Degree Course in Computer Engineering, University of Calabria. Previously, he lectured Computer Networks and Informatiom System at the University of Calabria

He is co-founder of the spin-off company eco4cloud srl.

Research activities

His research interests focus on distributed systems and networks, Cloud and Grid Computing, Green Computing, P2P networks, bio-inspired algorithms and protocols, Quantum Computing.

He published more than 50 articles in international journals, among which IEEE/ACM Transactions on Networking, IEEE Transacctions on Cloud Computing, IEEE Transactions on Evolutionary Computation, ACM Transactions on Autonomous and Adaptive Systems, IEEE Multimedia, Parallel Computing. He also published more than 100 papers in proceedings of international conferences.

He was guest editor for special issues of IEEE Transactions on Cloud Computing, Future Generation Computer Systems, Multiagent and Grid Systems, Journal of Network and Computing Applications, Natural Computing, New Generation Computing.

He is a member of the Editorial Board of the Journal of Network and Computing Applications, Elsevier, and he serves in the program committee of several international conferences. He is a member of ACM and IEEE.

Responsabilities in European Projects

Mastroianni was responsible for the following EU projects:

- EcoMultiCloud (http://www.eco4cloud.com/ecomulticloud). On behalf of the spinoff company Eco4Cloud, Mastroianni was the project manager of a 2-year project (December 2015 – November 2017), named EcoMultiCloud, funded by the European Union under the SME Instruments tool, phase 2.

- TREND (http://www.fp7-trend.eu/), "Network of Excellence on energy-efficient networking", from 2011 to 2013. The project was fcoordinated by the Politecnico di Torino, Italy, and funded by the EU under the Seventh Framework Programme (Contract INFSO-ICT-257740).

- CoreGRID (http://coregrid.ercim.eu/mambo/), "European Research Network on Foundations, Software Infrastructures and Applications for large scale distributed, GRID and Peer-to-Peer Technologies" (Contract IST-2002-004265), from 2007 to 2008.

Recent publications on international journals

- C. Mastroianni, F. Plastina, L. Scarcello, J. Settino, A. Vinci, "Assessing Quantum Computing Performance for Energy Optimization in a Prosumer Community". IEEE Transactions on Smart Grid, vol. 15, n. 1, January 2024.

- N. Tutkun, L. Scarcello, C. Mastroianni, "Improved Low-Cost Home Energy Management Considering User Preferences with Photovoltaic and Energy-Storage Systems". Sustainability, May 2023.

- A. Sannia, A. Giordano, N. Lo Gullo, C. Mastroianni, F. Plastina, "A hybrid classical-quantum approach to speed-up Q-learning". Scientific Reports, vol. 13, n. 3913, March 2023.

- L. Scarcello, A. Giordano, C. Mastroianni, "Edge Computing Parallel Approach for Efficient Energy Sharing in a Prosumer Community". Energies, MDPI, June 2022.

- C. Mastroianni, F. Cicirelli, M. Jia, S. Maharjan, I. Taylor, "Guest Editorial Special Issue on Edge Intelligence for Sustainable Smart Environments". IEEE Transactions on Green Communications and Networking, vol. 6, n. 1, March 2022.

- L. Scarcello, A. Giordano, C. Mastroianni, G. Spezzano, "Cascade computing model to optimize energy exchanges in prosumer communities". Heliyon, Elsevier, vol. 8, n. 2, February 2022.

- L. Scarcello, F. Cicirelli, A. Guerrieri, C. Mastroianni, G. Spezzano, A. Vinci, "Pursuing Energy Saving and Thermal Comfort With a Human-Driven DRL Approach". IEEE Transactions on Human-Machine Systems, 2022.

Contact

Address: ICAR-CNR, via P. Bucci 7/11C, 87036 Rende (CS), Italy.

Phone: +39 328 0476390, +39-0984-493866

E-mail: carlo.mastroianni@icar.cnr.it

Web: http://staff.icar.cnr.it/mastroianni