

## PERSONAL INFORMATION

Francesca Mele

✉ francesca.mele@cmcc.it

## POSITION

Computer Science Researcher

## WORK EXPERIENCE

14/04/2016–Present

**Post Degree at the Euro-Mediterranean Center on Climate Change Foundation, Advanced Scientific Computing Division**

via Augusto Imperatore 16, 73100 Lecce (Italy)

[www.cmcc.it](http://www.cmcc.it)

Main activities:

- Analysis and improvement of the computational performance of numerical simulation models
- Member of the NEMO HPC working group since 2018
- Member of the NEMO system team since 2017

01/04/2015–31/03/2016

**Research fellow, University of Salento**

Department of Innovation Engineering, University of Salento (Lecce)

SP6 Lecce-Monteroni, ECOTEKNE complex, 73100 Lecce (Italy)

[www.dii.unisalento.it](http://www.dii.unisalento.it)

Main activities:

- Services development for advanced data management in cloud computing environment
- Use of parallel architectures and virtualization technologies
- Installation, set-up and management of private cloud systems based on the OpenNebula open-source technology
- Composition of project deliverables focused on Cloud Computing and Cloud Federation topics within the research project DiCeT - LivingLab of Culture and Technology

**Business or sector** ING-INF/05 Information Processing Systems

21/05/2012–21/11/2012

**Extra Curricular internship**

Jentu S. Agr. R. L.

Contrada Masseria Marini s.n., 73010 Guagnano (Italy)

Main activities:

- Analysis and re-engineering of a traceability system in the supply chain of IV gamma products
- Development of an automatized traceability system based on web/mobile applications and TAG RFID UHF, NFC and Datamatrix technologies
- Writing of technical reports

**Business or sector** Information and Communication Technology

## EDUCATION AND TRAINING

23/04/2018–27/04/2018

**Certificate of attendance at the International Spring School on High Performance Computing**

Donostia International Physics Center (DICP), San Sebastián / Donostia (Spain)

Update and follow-up activities on the advances in the critical and fast developing area of high-performance computing.

- 05/2013–12/2014

**Training course in "Innovation manager for the development of sustainable entrepreneurial engineering"**

University of Salento, Lecce (Italy)

  - Business management skills
  - Entrepreneurial skills
  - Communication skills
  - Planning and management of complex research projects
  - Work in the IT team during the course internship period as web/mobile developer using Java Spring open-source framework, Joomla and WordPress content management system, PHP programming, LDAP database server as OpenLDAP and Apache directory Server, MySQL and PostgreSQL

EQF level 7
- 20/02/2014

**Qualification for the profession of Information Engineer - Section A**

University of Salento, Lecce (Italy)
- 18/04/2012

**Master's Degree in Computer Engineering**

University of Salento (Lecce)

Final grade: 110 / 110

EQF level 7
- 28/04/2006

**Bachelor's Degree in Computer Engineering**

University of Salento, Lecce (Italy)

Final grade: 103 / 110

EQF level 6

PERSONAL SKILLS

Mother tongue(s) Italian

Foreign language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B1	B1	B1	B1	B1

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user  
Common European Framework of Reference for Languages

Communication skills Excellent interpersonal skills in the workplace

- Job-related skills
- Advanced techniques of parallelization on distributed and shared memory architectures
  - Performance analysis of parallel models
  - Use of parallel architectures

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem-solving
Proficient user	Proficient user	Independent user	Proficient user	Independent user

Digital skills - Self-assessment grid

- Parallel Programming Standards

- Advanced knowledge of MPI and OpenMP standards
- Good knowledge of OpenACC standard and CUDA
- Programming Languages
  - Advanced knowledge of Fortran and bash scripting
  - Good knowledge of Java and Fosstrak and Spring Java frameworks, C, C ++, PHP
- Operating systems
  - Advanced knowledge of Microsoft Windows, Unix/Linux
  - Good knowledge of Android
- Good knowledge of modeling languages: UML, BPMN, ER/EER model
- Good knowledge of CMS: Joomla, WordPress and SugarCRM
- Good knowledge of DBMS: MySQL, PostgreSQL, MS SQL Server, OpenLDAP

Driving licence B

## ADDITIONAL INFORMATION

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### Publications

Vecchio P., Mele F., De Paolis L.T., Epicoco I., Mancini M. and Aloisio G. (2015) "Cloud Computing and Augmented Reality for Cultural Heritage", Lecture Notes in Computer Science, Springer Verlag, 9254, pp. 51-60, ISSN: 0302-9743, 2015

Mainetti L., Mele F., Patrono L., Simone F., Stefanizzi M.L., Vergallo R. (2013) "The impact of RF technologies and EPC standard on the fresh vegetables supply chain", International Journal of RF Technologies: Research and Applications, Vol. 5, pp. 1-40, ISSN: 1754-5730

Mainetti L., Mele F., Patrono L., Simone F., Stefanizzi M.L., Vergallo R. (2013) "An RFID-Based Tracing and Tracking System for the Fresh Vegetables Supply Chain", International Journal of Antennas and Propagation Volume 2013, Article ID 531364, 15 pages, ISSN:1687-5869