


PERSONAL INFORMATION

Giorgio Micaletto

 (Italy)

 giorgio.micaletto@cmcc.it

Sex Male | Nationality Italian

POSITION

Researcher in computer science

WORK EXPERIENCE

04/08/2014–Present

Post Degree position at the Euro-Mediterranean Center on Climate Change (CMCC) within the ASC (Advanced Scientific Computing) division

CMCC Foundation

Via Augusto Imperatore 16, 73100 Lecce (Italy)

www.cmcc.it

Main activities:

- Porting and optimization of climate models on emerging architectures
- Analysis of the partitioning problem for unstructured grid models: the SHYFEM case study within the TESSA (Development of technologies for the "Situational Sea Awareness") project.
- Development of the SHYFEM MPI-parallel model (both explicit and semi-implicit scheme) within the START (SisTemi di rApid mapping e contRollo del Territorio costiero e marino) project.
- Porting of the NEMO model on the MIC architecture within the IS-ENES2 (Infrastructure for the European Network of Earth System Modelling) project.

EDUCATION AND TRAINING

03/11/2003–10/04/2014

Bachelor's degree in computer engineering

EQF level 6

University of Salento, Lecce (Italy)

Thesis title: Simultaneous multithreading in the parallel architectures

23/04/2018–27/04/2018

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

Materials Physics Center, Donostia International Physics Center and Rovira i Virgili University, San Sebastian / Donostia (Spain)

Research training event aimed at updating participants about the most recent advances in the critical and fast developing area of high-performance computing.

Code Performance Optimizations

Parallel Algorithms

Parallel Programming with CUDA

Julia Programming Language

PERSONAL SKILLS

Mother tongue(s)

Italian

Foreign language(s)

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	

English	B2	B2	B1	B1	B1
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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
- Performance analysis of parallel models
 - Porting of stand-alone and coupled models on HPC systems
 - Advanced distributed and shared parallelization techniques

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

- Advanced knowledge of MPI and OpenMP standards
- Advanced knowledge of HPC systems with a focus on Intel architectures (Sandy Bridge, Ivy Bridge, Haswell, Broadwell, MIC processors and coprocessors)
- Good knowledge of partitioning libraries (PARMETIS, ZOLTAN)
- Good knowledge of optimized numerics libraries (PETSC, MUMPS)
- Good knowledge of analysis tools to profile and debug sequential and parallel applications: Allinea, Intel Trace Analyzer and Collector, Scalasca
- Programming languages:
 - Fluent Fortran, C, and Bash scripting
 - Good knowledge Java, C++, C#, Javascript

Driving licence B

ADDITIONAL INFORMATION

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes me, my qualifications, and my experience. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engaged.

I hereby authorize the processing of personal data and use thereof in accordance with Legislative Decree No. 196/2003.