PERSONAL INFORMATION

Sergio Cretì

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Sex Male | Date of birth 17/03/1975 | Nationality Italian

WORK EXPERIENCE

01/06/2013→ ongoing

OPA - Ocean Predictions and Applications Division.

Euro-Mediterranean Centre on Climate (CMCC),Via Augusto Imperatore 16, 73100 Lecce, Italy. www.cmcc.it

- Implementation of several full automatic operational chains dealing with download, pre- and post-processing and delivery of environmental data for the Mediterranean Sea.
- Implementation of operational chains for the web visualization of sub-regional forecasting systems output (netcdf format) such as the Adriatic Forecasting System (AFS), the Adriatic Ionian Forecasting System (AIFS) and the Southern Adriatic Northern Ionian coastal Forecasting System (SANIFS)
- Implementation of a production quality control system
- Implementation of full automatic systems for restoring of Forecasting Systems in case of failure during production phase
- Implementation of back-end data management procedures for several DSS in the oceanographic field, in particular for the Mediterranean Sea area
- Support on DSS code debugging written in C++ and Fortran.
- System Administrator of Cluster IBM machine with 11 bi-processor (16 cores per node) computing nodes IBM X3550M4 and bi-processor (24 cores per node) computing nodes IBM X3550M4 interconnected through a FDR InfiniBand network (56Gb/sec)),
- Compilation and installation of different software and libraries for the visualization and management of scientific data (NetCDF/Grib format)
- Installation and management of a backup system on Cluster machine (Amanda software)

01/07/2013→30/12/2013

STAGE ON OPERATIONAL OCEANOGRAPHY

Edificio DHiTech, corpo C - c/o campus Ecotekne - via per Monteroni, s.n.c., 73100 Lecce (www.apphia.it)

- Analysis and prototyping of an on-board application on low-cost hardware (Raspberry) for map visualization and different geo-referenced layers of environmental fields..

Business or sector Operational oceanography, informatics and engineering analysis.

01/2006→11/2006

ASP.Net Programming

Coop Sociale Teatro Dei Veleni.

- Development of website and Client-Server application for contacts and events management, and online reservation for the events of Coop Sociale Teatro Dei Veleni

Business or sector Web design and creation, Data Base design and management

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EDUCATION AND TRAINING

| 14/01/2013→30/06/2013 | **Training course on Operational Oceanography** | 8 |

CMCC, Centro Euro-Mediterraneo sui Cambiamenti Climatici Via Augusto Imperatore 16, 73100 Lecce, Italy

▪ Marine Biogeochemistry, Numerical Analysis, Coastal Engineering, Oceanography (Physics, by Satellite and Operational), Meteorology Physics, Oceanographic Numerical Modeling, Simulations of Lagrangian dispersion of pollutants, Techniques of Statistical Analysis and Data Assimilation, Instruments and Observing Methods in Situ, Systems information and Data Management, use of software applied to the oceanograpy.

| 11/2012→01/2013 | **Course of English language: "Academic English"** | 6 |

CENTRO LINGUISTICO D´ATENEO (ATHENAEUM LANGUAGE CENTRE), Via Carluccio 73100 LECCE (LE)

▪ Listening, speaking, reading and writing English language. Academic English (Science and Engineering) (Intermediate - B2)

| 1995→2012 | **MSc degree in Computer Engineering** | 7 |

University of Salento (Lecce), Faculty of Computer Engineering

▪ Networking, informatics, robotics, systems theory, automatic controls, signals theory, electrical communications, digital and analogic electronics.

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PERSONAL SKILLS

| Mother tongue(s) | Italian |

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	A1	B1	A1	A2	B1
French	A1	A1	A1	A1	A1

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
Common European Framework of Reference for Languages

| Communication skills | Good ability to work in a multicultural group |
| | Spirit of adaptation |

| Organisational / managerial skills | Good organisational and managerial skills acquired at CMCC |

▪ Flexibility and marked inclination for teamwork
▪ Ability to organize and to coordinate steadily the job.

Job-related skills

Technical and Scientific Qualifications:
▪ Major programming languages, Operative Systems (Windows and Linux), Major Frameworks (Visual Studio and Netbeans), Database Management and Creation, Matlab simulations in validation of algorithms
▪ Practice application of motion control law to AUVs (Autonomous Underwater Vehicle)
▪ Experience in the design of motion control law for underactued marine vehicle in presence of marine current

Computer skills	General computer skills:

- Ability of management and administration of servers and IBM cluster. Knowledge and use of software for the use of big data and IT complexes for the maximization of the processing functions and the supporting infrastructure acceleration of applications and increased scalability.
- High knowledge of scheduler queue management jobs on cluster (Slurm) for calculating serial and parallel.
- Knowledge of the main Operating Systems: Windows, Linux (Centos, Ubuntu), Mac OS X.
- Installation of programs from source code on different operating systems.
- Knowledge of programming languages and information management (I / O Parallel) for parallel and distributed computing (MPI, Open MPI).
- Theoretical knowledge of digital electronics and practice of VHDL.
- Knowledge of the major programming languages (Fortran, Bash Scripting, Perl, Python, Java, C / C ++, C #, XML, HTML, Javascript, Java servlets, JSON).
- Knowledge of the XNA framework for designing video games for Microsoft's Xbox or Windows Phone)
- Modeling, creation and management of DataBase (Microsoft SQL Server) and design skills and information management and information systems.
- Deep knowledge of the major development environments SoftWare (VisualStudio, NetBeans, QT) and technologies of software development for the web (ASP.NET)
- Knowledge of the main management software and visualization and programming languages for scientific data: NetCDF, Grads, Fortran, NCL, CDO, NCO.
- Knowledge of Microsoft applications and Office, in particular Word,Excel and Power Point
- Deep knowledge of the Internet and Telematics.
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Other skills	Skills acquired in the real life:

- Repairer and assembler of electronic and electric components (TV, Mobile Phones, Computer Desktop and laptop computers, various home appliances)

Driving licence	Driving licence categories:

- A and B

ADDITIONAL INFORMATION

Publications	A Proof of Concept for the Guidance of 3D Underactuated Vehicles Subject to Constant Unknown Disturbances.

Date: 30/09/2012
Place: Arenzano, Genova. Name: 9° IFAC Conference on Manoeuvring and Control of Marine Craftawards, memberships, references.

Degree	Thesis: Kinematic guidance of an AUV (Autonomous, underwater vehicle) subject to constant unknown sea currents"