

Eric MAISONNAVE
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Date of birth: January 24, 1971
French Nationality
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Computing Scientist

Education

July 1994 **Engineer degree** from the Physics Department of I.N.S.A., one of the french "grandes écoles"

Employment History

February 1999 - **Research Engineer**
May 2000 *Global Change and Climate Modeling group, CERFACS (European*
& *Center for Research and Advanced Training in Scientific Computing),*
December 2000 - *Toulouse, France*
Present

1. **Climate Modeling:** set up of several coupled GCMs configurations from technical aspects (model interfacing for OASIS **coupling**, interpolation choice) to physics parametrization (diagnostics, balancing)
2. Co-lead of a FP7 (IS-ENES2) and a H2020 (IS-ENES3) workpackage for climate model, workflows & data post-processing adaptation to massive parallelism MPI/OpenMP
3. **CGCM porting on grid, vector, scalar and massively parallel platforms** (Grid'5000, Fujitsu VPP, NEC SX, Earth Simulator, IBM Blue Gene, CRAY, BULL supercomputers). **Performance, benchmarking, optimizations**
4. **Grid Computing (LEGO ANR Project Leader):** component programming, client/server and workflow definition, deployment, resources mapping
5. Developments of statistic analysis and visualization toolkits

June 2000 - **Research Engineer**
November 2000 *Institut Pierre Simon Laplace, I.P.S.L., C.N.R.S., University of Paris VI,*
France

1. **Coordination** of model coupling actions of atmospheric (LMD) and oceanographic (LOCEAN, LSCE-CEA) laboratories.
2. Standardization of models configurations, implementation of new coupling physic routines and platform independent coupled models packages

Visiting Scientist

Code coupling dedicated support Jet Propulsion Laboratory (California), JAMSTEC - Earth Simulator Center (Japan), Met Office (UK), SMHI (Sweden), ETHZ (Switzerland), IFREMER (France), AWI (Germany), BSC (Spain), BTU (Germany), LOCEAN (France), NERSC (Norway), DWD (Germany), GEOMAR Kiel (Germany), Météo-France, Mercator Ocean International (France)

Computer Literacy

Computers Development, porting and optimization on **Supercomputers** (NEC SX, Earth Simulator, Fujitsu VPP, IBM Blue Gene) and **Grids** (Grid'5000, Condor, SGE)

Operating systems

- Strong educational background on **UNIX**
- **20 years** of bourne, korn and C **shells** programming
- Knowledge of Windows, Ms-dos, VMS

Languages

- Proficiency in **C code development** (graphic libraries, graphical user interface, event driven application)
- Fluent in **Fortran 77-90-95**
- Knowledge of C++, Ada, Pv-wave, Cgi, **HTML**, LaTeX, Netcdf, **Matlab**
- **MPI / OpenMP** parallelization

Softwares

- Visualization: Pv-wave, Ferret, **IDL**, GMT, NCL
- GCM: ARPEGE Climat (Météo-France), NEMO-CLIO, LMDZ (C.N.R.S.), ECHAM (Max Planck Institute), QTCM (UCLA)
- GCM Coupler: Oasis (Cerfacs)
- Others: Oracle, Sybase (databases), CVS (Version control system)

Language Skills

English, Spanish