Curriculum vitae: Guillaume Latu

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Personal information:

Born 1975, France. French citizen. Married, 1 child.
Languages: French, English.

Education:

HDR in Compter Science, University of Strasbourg – France, May 2018.
Title: "*Contribution to high-performance simulation and highly scalable numerical schemes*"
Ph.D. in Compter Science, University of Bordeaux 1 (LaBRI) – ScAlApplix/INRIA project, France, December 2002.
Title: "*Parallel algorithmic and high performance computing dedicated to a simulation of a host-macroparasite system*".
D.E.A. (Postgraduate diploma) Computer Science Department, University of Bordeaux 1 (LaBRI), June 1998.
Engineer in Computer Science (M.Sc. equivalent) ENSEIRB Bordeaux, France, 1994 - 1998.

Employment:

2009 - now: Researcher-Engineer at *CEA/IRFM*
2003 - 2009: Assistant Professor (permanent position), University of Strasbourg 1/LSIIT, France.
Member of the CALVI/INRIA project. Partial secondment (2006-2008) in the ScAlApplix/INRIA project.
2002 - 2003: Teaching assistant, Post-Doctoral Researcher.
ENSEIRB (Graduate Engineering School)/LaBRI, France. Member of the ScAlApplix/INRIA project.
2001 - 2002: Teaching Assistant, Junior Researcher (PhD Candidate). University of Bordeaux 1, France.
2000 - 2001: Military service as scientific fellow in the Center of Operational Research and Simulation of the Army (CROSAT), Military School, Paris. Project: Distributed simulation of terrestrial battles.
1998 - 2000: Teaching Assistant, Junior Researcher (PhD Candidate). University of Bordeaux 1, France.

Research interests: Parallel algorithmics, Parallel simulation, Numerical schemes, Scientific computing.

Teaching and advising:

Graduate teaching

Courses: Parallel algorithms and applications, Operating System, Distributed Systems, MPI, Fortran, Grid computing, Advanced Algorithms.
Advising: Supervising 8 Master students for their research projects in Computer Science, Co-advising 7 Ph.D students, Supervising 3 engineers, Advising 4 Postdocs.

Undergraduate teaching

Courses: Imperative programming, Unix/Linux tools, Data structures and algorithms, Data base administration, Introduction to networks, Introduction to Java, Computer Architecture, Object-oriented programming, Fortran, Python.

Software:

Contributions in several softwares, among which : GYSELA, JOREK (parallel applications owned by CEA/France), Oïdium-Vineyard simulator (INRA/France).
Developed many prototype softwares (jointly with other researchers and students). Examples:
LOSS: Parallel simulator for plasma & beam physics using Semi-Lagrangian method (OpenMP+MPI, CUDA).
SPIN: Parallel simulator for high energy physics using Particle In Cell method (MPI).
OBIWAN: Adaptive simulator for plasma and beams physics using Semi-Lagrangian method (OpenMP).
Parasite: Stochastic simulation of a marine host-parasite system using a hybrid OpenMP+MPI programming.

Supports:

Academic supports

ACI Bio-informatique (2001-2003), ACI Grid (2003-2004), ANR Masse de données (MASSIM project 2005-2008), ARC Plasma Magn. (2006-2008), ANR CIS (HOUPIC project 2007-2010), ANR blanche (EGYPT project 2008-2011). ANR blanche (GYPSI project 2011-2015). ANR MN (ANEMOS project 2011-2015). ANR blanche (E2T2 project 2011-2015). 3 Eurofusion H2020 projects (years 2014-2015), PI: E. Sonnendrucker, M. Becoulet, P. Tamain. 2 Eurofusion H2020 projects (years 2015-2017), PI: E. Sonnendruecker, M. Hoelzl. Centre of Excellence in computing applications H2020, EoCoE (2015-2018). 5 HLST projects (Eurofusion grants for 6 months of engineer/postdoc position, 2011-2017). 3 PTC projects (CEA grants for 1-year engineer/postdoc position, 2017-2018).

Industrial supports

CEA Cadarache (2006-2008), CEA Bruyères-le-Châtel (2005-2007), TOTAL Pau (2008-2012).

Publications (overview):

https://www.researchgate.net/profile/Guillaume_Latu/publications
http://dblp.uni-trier.de/pers/hd/l/Latu:Guillaume