

Christine Plumejeaud

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Education

- December 2007** **PhD in Information Systems of Joseph Fourier University – Grenoble I**
Laboratory of Informatics of Grenoble ([LIG](#)), [STEAMER](#) team
“Models and methods for evolving and incomplete spatio-temporal information”
Ministry Grant
Supervision : Pr. Jérôme Gensel and Pr. Claude Grasland
- 2003-2007** **Master’s degree in Information Systems, title of Engineer in Computer Science obtained with honours, at the [CNAM](#), Conservatoire National des Arts et Métiers, Grenoble (France)**
- 1998/2000** **Four years university degree in industrial and applied mathematics, specialised with computer science, obtained with honours, at [Professional University Institute](#) of Joseph Fourier, Grenoble (France).**

Main subjects: Algorithmic for either sequential or parallel programming (obtained high marks), Statistics & Probabilities, Optimisation and Operational research, Analyse, Geometry, Project management.
- 1996/1998** **Two-year university diploma, specialised in mathematics, physics and computer science, obtained with honours at [University Joseph Fourier](#), Grenoble (France).**
- 1995/1996** **Preparatory classes for French Engineering Schools, at Champollion, Grenoble, (Isere, France) Advanced Mathematics and Physics classes in preparation for the competitive entrance examinations to the French Engineering Schools. Lycée Champollion, Grenoble (France).**

Work experience

[Eloquent SA](#): Research and Development engineer

(10/2001 – 11/2007) Le Versoud (Isère -France). www.eloquant.com

Eloquent is a start-up developing a telephony platform that hosts advanced voice services products. By developing modules that deal with various technologies, I’ve shown my flexibility. I’ve also sustained a streints for the operational platform. These modules (listed bellow) were developed with **Java**:

- A memory built-in relational view of data extracted from an object database
- A process controller managing processes, which specifications were stored in an object database
- Accounting and the billing operations on the platform: collection and storage of accounting data in a database (**Oracle**), data retrieving throughout a web interface.
- Web interface (based on the **Struts** framework) used to manage the operational part of the hosting
- Web interface for the Business Operation System that is aimed at supporting the billing operations and the statistics processing, using **servlets**, **JSP** and **XML** technologies.
- Support for [Hewlett_Packard](#) and performance testing of Eloquent’s **VoiceXML** browser inside a team.
- Interim at [France Telecom](#) (9 months): conception and developement of a set of **automatic test** for a Web platform managing a sub-net of enterprise telecommunication.
- Training of customers on **VXML** technologies
- **Project management** for customized development of hosted voice XML services: supervision of 3 engineers, management of the relationships with customers, and deliveries of the products.

I.N.R.I.A. : Associated Engineer to the research

(10/2000-10/2001) Grenoble (Isère -France) www.inria.fr

I.N.R.I.A. is the french National Institute for Research in Computer Science and Control. Short-term contract of one year in the project S.I.N.U.S (Numeric Simulation for Engineering Sciences), which purpose was the integration of collaborative multi-discipline applications in metacomputing environments.

- I was responsible for the development of C.A.S.T. (Collaborative applications Specification Tool) which was a specification tool, and a run engine to make collaborate together heterogeneous applications simulating complex phenomena.
- Designed a client-server architecture for an optimisation code for a wing profile (that was written in Fortran, C, and parallelized with MPI library), using **Corba** technology, and run it on a cluster of 300 PC.
- I developed new functionalities, using C++ and a graphic library called **wxWindows**, so that CAST could drive the previous example.
- I successfully achieved my goal by running this example through CAST, on different **PC 's cluster**, co-operating throughout a very high flow net (called VTHD) between Sophia-Antipolis, Rennes and Grenoble.

Publications

Book chapter

Christine Plumejeaud, Bogdan Moisuc, Sandro Bimonte, Marlène Villanova-Olver, Jérôme Gensel, **An Object-Oriented Model for the Sustainable Management of Evolving Spatio-Temporal Information** In: Geocomputation and Urban Planning edited by Beniamino Murgante, Giuseppe Borruso, Alessandra Lapucci. Series: Studies in Computational Intelligence, Vol. 176, Approx. 280 p., Springer 2009, ISBN: 978-3-540-89929-7

Nguyen G.-T., Plumejeaud C., **Intégration d'applications multidisciplines dans les environnements de metacomputing**, dans Calcul réparti à grande échelle, Ed. Françoise Baude, Hermès Lavoisier, 2002, ISBN: 2-7462-0472-X

National journal

Christine Plumejeaud, Jean-Marc Vincent, Claude Grasland, Jérôme Gensel, Hélène Mathian, Serge Guelton, Joël Boulier, **HyperSmooth : calcul et visualisation de cartes de potentiel interactives**, Colloque International de Géomatique et d'Analyse Spatiale. Numéro spécial de la Revue Nouvelle des Technologies de l'Information. RNTI-E-13, pp 19-42, ed. Cépaduès, 2008.

International conferences

Christine Plumejeaud, Julie Prud'homme, Paule-Annick Davoine, Jérôme Gensel, **Transferring Indicators into Different Partitions of Geographic Space**. In: David Taniar and Osvaldo Gervasi and Beniamino Murgante and Eric Pardede and Bernady O. Apduhan (eds): Computational Science and Its Applications -- ICCA, LNCS, Heidelberg: Springer, Vol. 6016, pp. 445-460

Christine Plumejeaud, Jean-Marc Vincent, Claude Grasland, Sandro Bimonte, Hélène Mathian, Serge Guelton, Joël Boulier, Jérôme Gensel **HyperSmooth, a system for Interactive Spatial Analysis via Potential Maps**, *8th international Symposium on Web and Wireless Geographical Information Systems 2008 - W2GIS 2008*, Shanghai, December 11-12, China, 2008.

Nguyen G.-T., Plumejeaud C., **An Integration Platform for Metacomputing Applications**, Computational Science - ICCS 2002, International Conference, Amsterdam, The Netherlands, April 21-24, 2002.

National conferences

Christine Plumejeaud, Jérôme Gensel, Marlène Villanova-Oliver **Opérationnalisation d'un profil ISO 19115 pour des métadonnées socio-économiques**, INFORSID 2010, Marseille, May 25-28, France, 2010 (in French).

Christine Plumejeaud, Julie Prud'homme, Paule-Annick Davoine, Jérôme Gensel **Etude de méthodes de transfert d'indicateurs associés à différents découpages du territoire - Application à la ville de Grenoble**, Colloque International de Géomatique et d'Analyse Spatiale (SAGEO 2009), Paris, November 25-27, France, 2009 (in French).

Christine Plumejeaud, Jérôme Gensel, Marlène Villanova-Oliver, Maher Ben Rebah, Guillaume Vergnaud, **Modélisation de hiérarchies territoriales multiples - Vers la gestion d'informations spatio-temporelles évolutives**, Colloque International de Géomatique et d'Analyse Spatiale (SAGEO 2009), Paris, November 25-27, France, 2009 (in French).

Christine Plumejeaud, Jean-Marc Vincent, Claude Grasland, Jérôme Gensel, Hélène Mathian, Serge Guelton, Joël Boulier, **HyperSmooth : calcul et visualisation de cartes de potentiel interactives**, Colloque International de Géomatique et d'Analyse Spatiale (SAGEO 2007), Clermont-Ferrand, June 18-20, France, 2007 (in French).

Report

« Acquisition de données et cartes de potentiel pour l'analyse spatiale. » Mémoire d'ingénieur CNAM, encadré par Jérôme GENSEL, Université Joseph Fourier, Grenoble, 28 juin 2007.

Teaching experience

Location	Hours	Discipline	Type of work
CNAM	28H (1 st cycle)	Software engineering (UML, RUP, XP)	lectures
CNAM	42H (2 nd cycle)	Urbanisation of information systems	lectures
CNAM	42H (1 st cycle)	Database conception (SQL 2)	lectures
CNAM	28H (1 st cycle)	Software engineering (UML, RUP, XP)	distance learning
UPMF – LP essig	12H (1 st cycle)	Java Web Developpement (Servlet, JSP, JDBC)	project
UJF	4H (1 st cycle)	Computer science	Magisterium supervision

Other relevant activities

Trainees supervision

- Marion Chauveau (professional master in computer science - 2nd cycle)
- Julie Prud'homme (research master in geography - 2nd cycle)
- Dounia Azzi (magisterium in computer science – 1st cycle)
- Dounia Azzi (magisterium in computer science - 2nd cycle)

Research projects

- [ETC-LUSI](#): combining environmental and socio-economical data
- [Hypercarte research group](#):
 - [HyperAtlas](#): spatio-temporal analysis tool
 - [ESPON 2013 database](#): metadata management in a long term database for socio-economic indicators
- [Shrinking regions](#): a Paradigm Shift in Demography and Territorial Development
- [INED](#): vizualisation of long term demography data using interactive maps

Others

- June 2008. Additional reviewer of the international conference BDA
- March 2009. Additional reviewer of the international conference INFORSID
- June 2009 Additional reviewer of the national conference MAJECSTIC

Foreign languages

French: mother tongue
English: working knowledge
German: basic knowledge

Other

Secretary of the [AI-CNAM PST](http://www.aipst.org/) association, since 5 years.
Sports: climbing, mountain walking, cycling, skiing.