

**Curriculum Vitæ**  
Marie-Christine Fauvet, Professor  
Joseph Fourier University of Grenoble<sup>1</sup>

## 1 General Information

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### 1.1 Education

I have completed all my education at the University of Grenoble, in France :

Year	Qualification
2001	“Habilitation à Diriger des Recherches” in Computer Science <i>Accreditation to Supervise Research</i> <i>French National Degree that allows the holder to apply on a Full-Professor position</i>
1988	Doctoral thesis in Computer Science Prepared under the supervision of Michel Adiba.

### 1.2 Employments

I have been on a tenure position at the University of Grenoble in France since 1989 :

Since	Institution/Organisation	Appointment Details
Since 9/2003	University of Grenoble	Professor <sup>3</sup>
From 9/2002 to 8/2003	University of Grenoble	Maître de Conférences <sup>2</sup>
From 9/2000 to 8/2002	UNSW - CSE, Sydney - Australia on leave from the Univ. of Grenoble	Visiting fellow
From 9/1992 to 8/2000	University of Grenoble	Maître de Conférences <sup>2</sup>
From 9/1989 to 8/1992	University of Grenoble	Maître de Conférences <sup>1</sup>

Position matching with the Australian academic system :

<sup>1</sup> Lecturer holding a PhD

<sup>2</sup> Senior Lecturer

<sup>3</sup> Full Professor

## 2 Academic Leadership

- Director of Computer Science Programs at the School of Computer Science and Applied Mathematics, University of Grenoble since September 2003.
- Program Co-Director of the Master by Research in Computer Science (2nd year), since September 2006.
- Program Director of the “DEA Systèmes d’Information” (European Master by Research in Information Systems), from January 2003 to August 2006.
- Program Director of “DESS Compétence Complémentaire en Informatique” (master by course-work in Computer Science), from 9/1997 to 8/2000 and from 9/2002 to 1/2003.
- Member of the Scientific Committee of the IMAG Research Institute (“Informatique et Mathématiques Appliquées de Grenoble”). Until January 2007, the IMAG Institute federated 8 research laboratories in Computer Science and Applied Mathematics (700 persons including 250 PhD students).
- Elected Member of the Research Committee of the University of Grenoble from January 1999 to September 2003.
- Elected Member of the Recruitment Panel in Computer Science of the University of Grenoble, from 1992 to 1997, and since February 2004.
- Member of the Administrative Board of the School of Computer Science and Applied Mathematics, University of Grenoble, from 1991 to 1994 and from 1997 to 1999, and since September 2003.

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<sup>1</sup>University of Grenoble in short

### 3 Teaching

I was or have been in charge of subjects in the following areas. I taught these subjects at different levels of education, for either computer science students or other scientific domains students, and in very diverse formats.

- Relational model (relational algebra and relational design).
- Relational Database Management Systems (SQL, PL/SQL, triggers, transaction management, query optimisation).
- Conceptual design of data : UML notation, UML to relational matching.
- Design and implementation of multi-tier applications involving persistent data.
- Service-based Information Systems.

I have also been involved in the following teaching :

- Algorithms and programming (undergraduate level)
- Programming in Java (postgraduate level)

### 4 Context of research

Until 2000 I conducted research in the database domain, specifically temporal data, versioning and schema evolution. I was responsible for the Tempos research group (Temporal Extension Models for Persistent Objects Servers) involving a full professor and up to 4 doctoral students.

Since September 2000, I work also on Integration of Web-based Information Systems issues (web service composition with transactional properties, service interfaces comparison, mediation-based resolution of incompatible services). I started working in this field when I was visiting UNSW in Sydney for a leave from my university (from 09/2000 to 08/2002). In September 2003, I took a Professor position at Joseph Fourier University of Grenoble. Since then, I am responsible for a research group which has involved three doctoral students (two of them have graduated).

### 5 Organisation and Program Committees

I co-chaired the following forums :

- Summer School on Web Intelligence (with Eric Gaussier, Prof. University of Grenoble). From the 7th to the 11th of July 2008 in Autrans, France (24 hours of lectures, 61 participants).
- Workshop on Web Services and Information Systems, in conjunction with the French conference INFORSID, May 2006, Hammamet, Tunisia (with Farouk Toumani, Prof. University of Clermont-Ferrand and Olivier Perrin University of Nancy).

I was involved in the organisation of the INFORSID French Conference on Information Systems (May 2005, Grenoble France).

I acted as a program committee member for the following conferences and journal :

- Information Systems and Web Services - WETICE, 2007
- French Conference on Ontology, 2007
- International Workshop on Database Interoperability (InterDB), 2006
- International Workshop on Service Composition (SERCOMP), 2006
- IEEE International Conference on e-Business Engineering (ICEBE), 2006
- International Conference on Business Process Management (BPM), in 2005.
- International Conference on Spatial Analysis and GEomatics (SAGEO), in 2005.
- Workshop on Business Processes and Services (BPS), in 2005.
- Special Issue on Service Oriented Modeling, International Journal of Cooperative Information Systems (IJCIS), 2004.
- First IEEE International Workshop on Electronic Contracting in 2004 (WEC'04).
- Asia Pacific Web Conference (APWeb) in 2004 and 2005.
- International Conference on Cooperative Information Systems (CoopIS) 2002, 2003 and 2004.
- French Conference on Information Systems (INFORSID), 1995, 2003, and 2008.
- Editorial board of the Hermes Journal on Geography and Computer Science (Géomatique) from January 2000 to December 2003.
- International Workshop on Temporal, Spatial and Spatio-Temporal Data Mining (held in conjunction with the European Conference on Principles and Practice of Knowledge Discovery in Databases) in 2000 and 2003.
- French Conference Advanced Databases, 1996, 2004 and 2005.
- French Conference on Geographical Information Systems (Cassini), 1998.

## 6 Participations to Doctoral Thesis Panels and PhD Reviews

I participated to the above HDR and PhD thesis panels.

As the chairman :

- Céline Lopez-Velasco. *Sélection et composition de services Web pour la génération d'applications adaptées au contexte d'utilisation*. Doctoral Thesis, Joseph Fourier University of Grenoble, Nov. 2008.
- Arnaud Da-Costa. *Une approche basée sur le double paradigme "ontologie-architecture de modèles" appliquée au traitement de collections d'images dans le domaine biomédical : XenOnt*. Doctoral Thesis, University of Dijon, Nov. 2008.
- Mohammed Graiet, *Contribution à une démarche de vérification formelle d'architectures logicielles*. Doctoral Thesis, Joseph Fourier University of Grenoble, Nov. 2007.
- Michael Mrissa, *Médiation et Composition contextuelle de Services Web*. Doctoral Thesis, Claude Bernard University of Lyon, Nov. 2007.
- Aree Teeraparbser, *Méthode et outils pour la création et l'évaluation automatiques de structures de bases lexicales multilingues (symétriques) à lexies et axes*. Doctoral Thesis, Joseph Fourier University of Grenoble, 2005.

As a reviewer and panel member :

- Lynda Tamine-Lechani. *De la Recherche d'Information orientée système vers la Recherche d'Information orientée contexte : verrous, contributions et perspectives*. "Habilitation à Diriger des Recherches". Paul Sabatier University of Toulouse. Nov. 2008.
- Yann Le Blevec. *Towards the conception of extended information systems organized around a web services platform*. Doctoral Thesis, Claude Bernard University of Lyon. Dec. 2008.
- Reviewer for Wen Shin (Kenneth) Wang's PhD thesis. *Interface Adaptation for Conversational Services*. Queensland University of Technology, Brisbane (Australia). Review done in Sept. 2008.
- Daniela Barreiro-Claro, *SPOC - Un canevas pour la composition automatique de services web dédiés à la réalisation de devis*. Doctoral Thesis, University of Angers. 2006.
- Sonia Sanlaville, *Environnement de procédé extensible pour l'orchestration - Application aux services web*. Doctoral Thesis, Joseph Fourier of Grenoble Grenoble. 2005.
- Reviewer for Rachid Hamadi's PhD thesis, *Formal Composition and Recovery Policies in Service-Based Business Processes*, University of New South Wales, Sydney (Australia). Awarded in 2005.
- Julia Bitcheva. *PointSynchro : un service pour la coordination de procédés interentreprises coopératifs.*, Doctoral Thesis. University of Nancy 1, Nov. 2003.
- Janne Skyt. *Managing Aging Data*, PhD Thesis. Department of Computer Science Aalborg University, Denmark, Sept. 2001.
- S. Chardonnel. *Emplois du temps et de l'espace - Pratique des populations d'une station touristique de montagne*. Doctoral Thesis. Joseph Fourier University of Grenoble. Jan. 1999.

## 7 Supervision of doctoral students in computer science.

- Yehia Taher. *Substitution of Web Services*. Co-supervision with Djamel Benslimane. Claude Bernard University of Lyon. Defense scheduled mid-2009.
- Ali Aït-Bachir - *ArchiMed framework for detection and resolving incompatibilities during service conversations*. Doctoral Thesis of UJF<sup>2</sup>, awarded in November 2008.
- Helga Duarte - *Toward a transactional model for web-based applications*. Doctoral Thesis of UJF, awarded in November 2007.
- Daassi Chaouki - *Multimodale interfaces for temporal DBMS*. Co-supervision with L. Nigay (CLIPS-IMAG Laboratory). Doctoral Thesis of UJF, awarded in 2003.
- Marlon Dumas-Menjivar - *TEMPOS : query languages for a temporal DBMS*. Co-supervision with P.-C. Scholl. Doctoral Thesis of UJF, awarded in June 2000.
- Jean-François Canavaggio - *TEMPOS : a temporal and historical model for a temporal DBMS*. Co-supervision with P.-C. Scholl. Doctoral Thesis of UJF awarded in 1997.
- Boualem Benatallah - *Schema evolution in object-oriented databases*. Co-supervision with M. Adiba. Doctoral Thesis of UJF awarded in 1996.

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<sup>2</sup>Joseph Fourier University of Grenoble

## 8 Research Grants

- Competitive Grant from Rhône-Alpes French Region *Web Intelligence*. This project works as a network of excellence which involves research teams from the main universities located in Rhône Alpes. I am a member of the steering committee. 2007-2010.
- Competitive Grant from IMAG Federation : *PLAGES : towards a framework for composing and coordinating Web oriented applications* involving 2 people from the LSR-IMAG and 2 people from the CLIPS-IMAG. 2004-2005.
- International Collaborative Research Grant *User-driven Composition of Web Services* involving the University of NSW (B. Benatallah and F. Rabhi), Queensland University of Technology (M. Dumas), and CLIPS-IMAG. 2003-2004. This project was funded by an ARC Linkage International Award and CNRS International Collaboration Grants.
- Competitive Grants from French Ministry of Research :
  - *Control of Database evolution* involving 5 people from Laforia-Paris, Lamsade-Paris, and LSR-IMAG laboratories - 1994-1996 (I was the only participant from the LSR-IMAG).
  - *Spatio-temporal Data Analysis, Constraints and Temporal Databases* involving 11 people from 2 computer science laboratories (INRIA/CNAM-Paris and LSR-IMAG) and from 1 geography laboratory (LAMA-Grenoble) - 1997-1999 (M. Dumas, P.-C. Scholl and me were the participants from the LSR-IMAG).
  - *Space dynamics management in temporal databases* involving 18 people from geography laboratories (UMR-ESPACE-Montpellier, COGIT-IGN-Paris and EMSE-St Etienne) and from computer science laboratories (LIRMM - Montpellier, LISI-INSA Lyon and LSR-IMAG) - 1997-1998 (I was the only participant from the LSR-IMAG)
  - *Mobile Objects : modeling, querying and indexing* involving 11 people from 2 computer science laboratories (INRIA/CNAM-Paris and LSR-IMAG) and from 2 geography laboratories (THEMA-Besançon and SEIGAD-Grenoble) - 1999-2000 (M. Dumas, P.-C. Scholl, C. Daassi and me were the participants from the LSR-IMAG).
  - *Models, visualisation and simulation of Patterns of Mobility* involving 10 people from 2 computer science laboratories (LRI-Paris and LSR-IMAG) and from 2 geography laboratories (UMR Espace-Avignon and UMR TEO-Grenoble) - 2002-2004 (C. Daassi and me are the participants from the LSR-IMAG)
- Industrial grant from EDF (French Company for Energy Production and Distribution) *Applying Active, Temporal and Multimedia Databases to EDF Applications* - 1997-1999 (with M. Adiba, C. Collet and P.-C. Scholl)
- Industrial grant from Thomson-CSF : *Temporal Databases* - 1995-1996 (with M. Adiba and P.-C. Scholl).

## 9 Publications

I have published nearly 60 refereed papers, most of them in volumes by established technical publishing houses : Springer Verlag, ACM Press, IEEE CS Press, Elsevier, Kluwer, etc. The table beside summarises my publications.

Type of publication	
Book	1
Book chapters	6
Refereed papers in journals	9
Refereed papers in conferences	47
Grants and research reports	26

Publications (limited to the period 2000-2008) are sorted by type and in each type, are listed below in reverse chronological order.

### Book Chapters

- [1] M. Dumas and **M.-C. Fauvet**. Web services (in french). In *Intergiciel et Construction d'Applications Réparties*, chapter 4, pages 77–102. This book is made available under Creative Commons Licence : <http://sardes.inrialpes.fr/ecole/livre/pub/>, 2006.
- [2] **M.-C. Fauvet**, M. Dumas, and P.-C. Scholl. Temporal databases (in french). In *Section "Bases de données" de l'Encyclopédie de l'Informatique et des Systèmes d'Information*, pages 577–584. Vuibert Paris. ISBN 978-7117-4846-4. Ouvrage coordonné par J. Akoka et I. Comyn-Wattiau., 2006.
- [3] B. Benatallah, M. Dumas, **M.-C. Fauvet**, and F. Rabhi. Chapter 10 : Towards patterns of web services composition. In F. Rabhi and S. Gorlatch, editors, *Patterns and Skeleton for Parallel and Distributed Computing*. Springer Verlag (UK), November 2002. ISBN : 1-85233-506-8, 28 pages.
- [4] M. Dumas, **M.-C. Fauvet**, and P.-C. Scholl. Chapter V, Temporal Data Models and Languages (in French). In G. Jomier and A. Doucet, editors, *Databases and the Web*. Hermès, 2001. 20 pages, ISBN 2-7462-0283-2.
- [5] **M.-C. Fauvet**, M. Dumas, and P.-C. Scholl. Modeling, querying and visualizing temporal data. In J. Le Maitre and H. Prade, editors, *New challenges in Information Science : documents and evolution (in French)*. Cépaduès, September 2000. ISBN 2-85428-535-2, 20 pages.

### Refereed International Journal Papers

- [1] M. Dumas, **M.-C. Fauvet**, and P.-C. Scholl. TEMPOS : a platform for developing temporal applications on top of object DBMS. *IEEE Transactions on Knowledge and Data Engineering*, 16(3), 2004. 35 pages.
- [2] M. Dumas, R. Lozano, **M.-C. Fauvet**, H. Martin, and P.-C. Scholl. A sequence-based object-oriented model for video databases. *Multimedia Tools and Applications*, 18(3) :249–277, December 2002.
- [3] B. Benatallah, M. Dumas, **M.-C. Fauvet**, F. Rabhi, and Q. Z. Sheng. Overview of some patterns for architecting and managing composite web services. *ACM SIGecom Exchanges*, 3(3) :9–18, August 2002.

### Refereed National Journal Papers

- [1] A. Ait-Bachir and **M.-C. Fauvet**. Archimed mediators-based framework for reconciliation of web service conversations (in french). *Journal on Network and Information Systems*, 13(4) :83–106, 2008. Special Issue on Models, Formalisms and Tools for Information Systems.
- [2] H. Duarte, **M.-C. Fauvet**, M. Dumas, and B. Benatallah. Towards a Composition Model for Web Services with Transactional Properties (in French). *Journal on Network and Information Systems*, 12(3), June 2005. Special Issue on Web Services.
- [3] C. Daassi, L. Nigay, and **M.-C. Fauvet**. A taxonomy of temporal data visualization techniques. *Revue des Sciences du traitement de l'Information*, 5(2) :41–63, 2005. Editions Cépaduès.
- [4] **M.-C. Fauvet** and S. Baina. Cooperative evaluation of queries on semi-structured distributed data (in French). *Journal on Network and Information Systems, Special Issue on Semi-Structured Data*, 8(5-6), 2003. Hermès Science Publications et Lavoisier. 20 pages.
- [5] T. Thevenin, **M.-C. Fauvet**, and D. Josselin. Spatio-Temporal Modeling for Public Transport. Towards a Multimodal Framework Supporting Buses, Demand Responsive Transport and Pedestrian Areas (in French). *European Journal of Geographical Information Systems and Spatial Analysis*, 13(2), 2003. 25 pages.

### Refereed International Conference and Workshops Papers

- [1] A. Ait-Bachir, M. Dumas, and **M.-C. Fauvet**. Detection behavioural incompatibilities between pairs of services. In *Proc. of the 4th WESOA08 Int. Workshop, in conjunction with the 6th Int. Conf. on Service Oriented Computing*, Sydney, Australia, 2008. To appear.
- [2] A. Ait-Bachir, M. Dumas, and **M.-C. Fauvet**. Besimal : Behavioural service interface analyser. In *Proc. of the 6th BPM08 Int. Conference, Demo Session*, pages 374–377, Milano, Italy, 2008.
- [3] Y. Taher, **M.-C. Fauvet**, M. Dumas, and D. Benslimane. Using cep technology to adapt messages exchanged by web services. In *Proc. of the WWW08 Int. Conference, Poster Session*, Beijing, China, 2008. 2 pages, to be published.
- [4] D. Benslimane, Z. Maamar, Y. Taher, M. Lahkim, **M.-C. Fauvet**, and M. Mrissa. A multi-layer and multi-perspective approach for web services composition,. In *Proc. of the 21st IEEE International Conference on Advanced Information Networking and Applications (AINA-07)*, pages 31–45, Niagara Falls, ONT, Canada, 2007.
- [5] A. Ait-Bachir and **M.-C. Fauvet**. Reconciling web service failing interactions. Towards an approach based on automatic generation of mediators. In *Proc. of the 16th IEEE International Workshops on Enabling Technologies : Infrastructures for Collaborative Enterprises (WETICE), Workshop on Information Systems and Web Services*, page 6. IEEE CS Press, 2007.
- [6] **M.-C. Fauvet** and A. Ait-Bachir. An automaton-based approach for web service mediation. In *Proc. of the 13th International Conference on Concurrent Engineering. Workshop on Web Services*, pages 47–54, Antibes, France, 2006.
- [7] Y. Taher, D. Benslimane, **M.-C. Fauvet**, and Z. Maamar. Towards an approach for web services substitution. In *Proc. of the 10th International Database Engineering & Applications Symposium (IDEAS 2006)*, pages 166–173, New Delhi, India, 2006.
- [8] **M.-C. Fauvet**, H. Duarte, M. Dumas, and B. Benatallah. Handling transactional properties in web service composition. In *Proc. of the WISE International Conference*, pages 273–289, New York City, USA, 2005.
- [9] C. Daassi, L. Nigay, and **M.-C. Fauvet**. Visualization process of temporal data. In *Proceedings of the DEXA Conference*, Zaragoza, Spain, 2004. Springer Verlag. LNCS No 3180.
- [10] **M.-C. Fauvet**, M. Dumas, and B. Benatallah. Collecting and querying distributed traces of composite service executions. In R. Meersman and Z. Tari, editors, *Proceedings of the 10th International Conference on Cooperative Information Systems (CoopIS02)*, number 2519 in LNCS, pages 373–390, Irvine, CA, USA, October 2002. Springer-Verlag.

- [11] C. Daassi, **M.-C. Fauvet**, and L. Nigay. Visual analysis : Multiple representations of temporal data. In *Proceedings of the 13th International Conference on Database and Expert Systems Applications - DEXA 2002*, Aix en Provence, France, September 2002. 10 pages.
- [12] **M.-C. Fauvet**, M. Dumas, F. Rabhi, and B. Benatallah. Patterns for e-services composition. In *Proceedings of the 3rd Asian Pacific Conference on Pattern Languages of Programs (KoalaPLoP 2002)*, Melbourne, Australia, 2002. 12 pages.
- [13] **M.-C. Fauvet**, M. Dumas, B. Benatallah, and H. Paik. Peer-to-peer traced execution of composite services. In *Proceedings of the International Workshop on Technologies for E-Services (TES 2001)*. In cooperation with VLDB 2001., Roma, Italy, 2001. 15 pages.
- [14] M. Dumas, R. Lozano, **M.-C. Fauvet**, H. Martin, and P.-C. Scholl. Orthogonally modelling video structuration and annotation : exploiting the concept of granularity. In *Proc. of the AAAI-2000 Workshop on Spatial and Temporal Granularity*, Austin, Texas, USA, July 2000. 8 pages.
- [15] M. Dumas, C. Daassi, **M.-C. Fauvet**, L. Nigay, and P.-C. Scholl. Pointwise temporal object database browsing. In *Proc. of Symposium on Objects and Databases (ECOOP)*, Sophia Antipolis and Cannes, France, June 2000. 10 pages.

#### **Refereed National Conference Papers and Tutorials**

- [1] A. Ait-Bachir and **M.-C. Fauvet**. Providing mediators to reconcile web service conversations (in french). In *Proc. of the French Information Systems Conference, INFORSID*, Perros-Guirec, France, 2007. 16 pages.
- [2] **M.-C. Fauvet**, H. Duarte, Y. Taher, and D. Benslimane. Dynamic selection of web services – a community-based approach (in french). In *Proc. of the French Conference on Information Systems, INFORSID*, Perros-Guirec, France, 2007. 16 pages.
- [3] A. Ait Bachir and **M.-C. Fauvet**. Mediating web service conversation – a labeled transition system based approach (in french). In *Web service workshop in conjunction with the French Conference on Information Systems, INFORSID*, Hammamet, Tunisie, 2006.
- [4] C. Daassi, L. Nigay, and **M.-C. Fauvet**. Software vs. hardware component for interacting with temporal values (in french). In *Proc. of the 16th French Speaking Conference on HIM*, Namur, Belgique, 2004.
- [5] S. Chardonnel, C. du Mouza, **M.-C. Fauvet**, D. Josselin, and P. Rigaux. Modelling and querying patterns of mobility (in French). In *Proceedings of the French CASSINI Conference*, Grenoble, France, 2004.
- [6] C. Daassi, L. Nigay, and **M.-C. Fauvet**. Interacting with temporal data : Software component or physical device ? (in French). In *Proceedings of the 16th Conference in French about HMI*, Namur, Belgium, 2004.
- [7] **M.-C. Fauvet**. Toward a web services management system (in French). In *Tutorials of the INFORSID Conference*, 2003.
- [8] T. Thevenin, **M.-C. Fauvet**, and D. Josselin. A Spatio-temporal model for public transports (in French). In *Proceedings of the 6th CASSINI Conference*, Presqu'île de Crozon, France, 2002. 25 pages.
- [9] **M.-C. Fauvet**, B. Benatallah, M. Dumas, and H. Paik. Self-coordinated and self-traced dynamic composite services. In *Proceedings of the 16th French Conference on Advanced Databases*, Agadir, Maroc, November 2001. 21 pages.
- [10] C. Daassi, M. Dumas, **M.-C. Fauvet**, L. Nigay, and P.-C. Scholl. Visual exploration of temporal object databases. In *Proceedings of the 17th French Conference on Advanced Databases*, Blois, France, October 2000. 18 pages.