



## College of Arts and Applied Sciences

**Full Name: Nafaâ Jabeur**



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### **CURRENT POSITION:**

Since Sep. 2009 **Chairperson of the Computer Science Department**  
College of Arts and Applied Sciences – CAAS, Dhofar University

### **EDUCATION:**

2001 – 2006 **PhD in Computer Science**  
Supervisor: Pr. *Bernard Moulin* (Department of Computer Science and Software Engineering, Laval University, Québec, Canada).  
Co-supervisor: Pr. *Yvan Bédard* (Department of Geomatic Sciences, Laval University, Québec, Canada). Topic: A multiagent-based approach for on-the-fly map generation and spatial conflict resolution. Distinction: Very good.

1999 – 2001 **MSc in Computer Science**  
Supervisor: Pr. *Bernard Moulin* (Department of Computer Science and Software Engineering, Laval University, Québec, Canada). Co-supervisor: *Brian Morse* (Department of Civil Engineering, Laval University, Canada). Topic: A multiagent-based approach for ship course planning on the Saint Lawrence River. Distinction: Very Good

1995 - 1998 **Engineer in Computer Science** National Engineer School of Computer Science and System Analysis, ENSIAS, Rabat, Morocco. Distinction: Very Good

- 1993 - 1995 Preparatory Classes to High Schools of Engineers, Agadir, Morocco Success in the kingdom entrance exam to high schools of engineers.
- 1987 - 1993 **French type of Baccalaureate in Mathematics (Diploma of College Studies)**, Kerkennah, Tunisia. Distinction: Excellent

### EXPERIENCE:

- Oct. 2007 - Present **Assistant Professor**, Computer Science Department, College of Arts and Applied Sciences – CAAS, Dhofar University, Dhofar, Sultanate of Oman.
- Sep. 2009 – Present **Chairperson of the Computer Science Department**, CAAS, Dhofar University
- Sep. 2006 – Jul 2007 **Post-doctoral Fellow** at Windsor University, Windsor, Ontario, Canada
- Jan. 2000 – Aug. 2006 **Part time lecturer** , Analysis and design of information and oriented object systems, University of Laval, Quebec, Canada
- Feb. 1999 – Jun. 1999 **Engineer in computer science**, HighTech Payment System Company, Casablanca, Morocco.

### TEACHING

#### List of courses taught

- Software Engineering
- Artificial Intelligence
- Theory of Computation
- Analysis and Design of Information Systems
- Analysis and Design of Oriented Object Systems
- Database Systems
- Introduction to Programming
- Introduction to multimedia concepts
- Data Structures

### RESEARCH

#### Research Interest:

- Sensor Web and Wireless Sensor Networks.
- Artificial intelligence.
- Multiagent systems.
- Information Systems and Oriented object analysis and design.
- Geographic Information Systems (GIS).
- Web and mobile services.
- Mobile and distributed computing.
- Spatial and temporal databases.
- Data acquisition, modeling and visualization.
- Human-computer interaction.

## Research Projects:

Nov 2009 – Present	Sensor Networks for an Enhanced and Personalized Management and Use of Resources (SNEPMURe)
Jun 2008 – Sept 2009	Marine positioning engine, Dhofar University, Sultanate of Oman.
Jan 2008 – Dec 2008	An Automated Infrastructure for the Management of Multi-Service Sensor Networks, Dhofar University, Sultanate of Oman.
Jan 2007 – Dec 2008	SWAN: Sensor Web Automated Network, In Collaboration with MEMF lab, University of Windsor, Ontario Canada.
Sep 2006 – Jul 2007	An advanced telemetry system for complex environmental monitoring applications, MEMF lab, University of Windsor, Ontario Canada.
Sep 2006 – Jul 2007	Darts and rovers: A real-time, in-situ environmental data acquisition system integrating mobile field workers with a remotely deployed sensor web, MEMF lab, University of Windsor, Ontario Canada.
Sep 2006 – Jul 2007	An integrated sensor web deployment infrastructure for watershed monitoring, MEMF lab, University of Windsor, Ontario Canada.
Nov 2002 – Dec 2005	SIGERT: Système Intelligent pour la Gestion des Espaces Récréatifs et Touristiques, University of Laval, Quebec, Canada.
Jan. 2000 – May 2001	Ship courses planning in the Saint-Lawrence River, University of Laval, Quebec, Canada.
Jan. 2004 – May 2004	Survey of Unmanned Air Vehicle (UAV) and Unmanned Combat Air Vehicle (UCAV) missions, for the ministry of Defense, Quebec, Canada.

## **PUBLICATIONS**

### I. Articles in Refereed Professional Journals:

1. Biju, Sayed, Nafaâ. Jabeur and Mohammed. Arif (2009). "An Archetype to Sustain Knowledge Management Systems through Intranet", International Journal of Social Sciences, Vol. 4, Page no. 228-232.
2. N Jabeur, P Graniero, J McCarthy and X Xing, (2009) A Knowledge-Oriented Meta-Framework For Integrating Sensor Network Infrastructures. International Journal of Computers & Geosciences, Vol. 35, 2009, pp: 809-819.
3. Beaubrun, R., Moulin, B., Jabeur, N. (2007) An Architecture for Delivering Location-Based Services. International Journal of Computer Science and Network Security, Vol. 7 No. 7 pp. 160-166
4. Jabeur, N., Moulin, B. Boulekrouche, B. (2005) Toward the improvement of on-the-fly web and mobile map personalization. In GESTS International Journal, International Transactions on Computer Science and Engineering, Volume 25, Number 1: 109-120.
5. Gbei, E.F., Moulin, B., Cosma, I., **Jabeur**, N., Delval, N. (2003) Conception d'un prototype de service Web géolocalisé appliqué à l'industrie récréo-touristique. *Revue internationale de géomatique*. Vol. 13 : 375-395.
6. Moulin, B., **Jabeur**, N., Morse, B. (2002) Benefits of a multi-agent approach to solving the problem of ship course planning on the St. Lawrence River. *Geomatica Journal*, Volume 56, Number 1: 35-43.

### II. Book chapters:

1. Iraqi, Y. and **Jabeur**, N., (2010) Survey on Operating Systems for Wireless Sensor Networks (in Arabic). Chapter 5 in Book: Sensor Network Deployment Algorithms (in Arabic). (in press)

2. N **Jabeur**, N Sahli (2009) Spatial Knowledge. Book: Scientific Data Mining and Knowledge Discovery: Principles and Foundations. Mohamed Medhat Gaber (Ed.). Chapter 7, pp: 141-172.
3. N Sahli, N **Jabeur** (2009) Knowledge Discovery and Reasoning in Geospatial Applications. Book: Scientific Data Mining and Knowledge Discovery: Principles and Foundations. Mohamed Medhat Gaber (Ed.). Chapter 10, pp: 151-168.
4. N. **Jabeur**, B. Boulekrouche, B. Moulin, (2006) Using multi-systems to improve real time mobile map generation, in Lamontagne and M. Marchand (Edts), *Advances in Artificial Intelligence*, Springer Verlag LNAI 4013, 37-48.

### **III. Articles and Abstracts in International Conferences:**

1. **Jabeur** N. (2010): A Bully Approach for Mobile Map Generation. IEEE International Conference on Integrated Intelligent Computing (ICIIC 2010), Bangalore, India, August 05-07 (in press)
2. Iraqi, Y. and **Jabeur**, N., (2009) Service Admission Control in Multi-Service Sensor Networks. In proceedings of the IEEE Symposium on Computers and Communications (ISCC'09), July 5 - 8, 2009, Sousse, Tunisia, pp: 926-931
3. **Jabeur** N., Iraqi Y., Sahli N. (2009). Semantic Routing in Wireless Sensor Networks: Challenges and Opportunities. IEEE Global Information Infrastructure Symposium. Tunisia 2009.
4. **Jabeur** N., Haddad, H. (2009) Using Causality Relationships for a Progressive Management of Hazardous Phenomena with Sensor Networks. In proceedings of the International Conference on Computational Science and Applications (ICCSA 2009), June 29-July 2, 2009, Yongin, Korea, pp: 1-16
5. Biju, S., **Jabeur**, N., Sahli, N. (2009) Knowledge Management Systems to Preserve Diminishing over Changeover of Professionals International. Accepted in the International Conference on Knowledge Management and Knowledge Economy (ICKMKE 2009), June 24-26, Paris, France. (*in press*)
6. **Jabeur**, N., Iraqi, Y. (2008) A Service-Driven Approach for Sensor Web Progressive Self-Organization. In proceedings of the 4<sup>th</sup> International Conference on Self-organization and Adaptation of Computing and Communications (SACC 2008), 22-24 July, Glasgow, UK, 2008. pp: 173-177, Vol. 4.
7. **Jabeur**, N., McCarthy, J.D., Graniero, P. (2008) Improving Wireless Sensor Network Efficiency and Adaptability through an SOS Server Agent. In proceeding of the 1<sup>st</sup> IEEE International workshop on the Applications of Digital Information and Web Technologies (ICADIWT 2008). 4-6 August, Ostrava, Czech Republic, pp: 409-414.
8. M. Mekni, N. **Jabeur**, and B. Moulin (2008). A generic model for situated holonic multi-agent systems: A case study on sensor web management. In MDAI 2008: Proceedings of 5<sup>th</sup> International Conference on Modelling Decisions for Artificial Intelligence, pages 35–46, Sabadell, Spain, October 2008.
9. **Jabeur**, N., Graniero, P. (2007) A Hybrid Location-Semantic Approach to Routing Assisted by Agents in a Virtual Network. In Frontiers of High Performance Computing and Networking ISPA 2007 Workshops, 2007, pp. 523-533.
10. **Jabeur**, N., Graniero, P. (2007) Agent-Based Clusters to Virtually Manage Spatially Distributed Sensors. Presented at Geocomputation 2007 NUI Maynooth, Ireland , 2007.
11. **Jabeur**, N. and Boulekrouche, B. (2006) Spatial conflict resolution by means of multiagent systems. International conference Agent, Multiagent systems, from theory to practice (AMTA), Québec, Canada, June 5-6 (Cd-Rom)

12. **Jabeur**, N., Moulin, B. Boulekrouche, B. (2006) A Multiagent-Based Approach for Real-Time Mobile Map Generation. Canadian Conference on Electrical and Computer Engineering, IEEE Canada, Ottawa, Canada, May 07-10 (Cd-Rom)
13. **Jabeur**, N., Moulin, B. (2005) A Multiagent-Based Approach for Progressive Web Map Generation. In R. Meersman, Z. Tari and P. Herrero (editors), Agents for Web Service Support, Volume 3762 of Lecture Notes in Computer Science: 99-108.
14. **Jabeur**, N., Moulin, B. (2004) A Multiagent-Based Approach for the resolution of spatial conflicts. Second European Workshop on Multiagent Systems. Barcelona, Spain, December 16-17: 333-343.
15. **Jabeur**, N., Moulin, B (2004) Une approche multiagent pour la résolution de l'encombrement spatial lors de la génération automatique des cartes. Canadian Conference in Geomatics 2004, Montreal, Canada, October, 28-29. (Cd-Rom)
16. **Jabeur**, N., Moulin, B., Gbei, E.F., Cosma, I. (2004) SIGERT: Un service Web cartographique basé sur l'utilisation de représentations multiples et des formats GML et SVG. Canadian Conference in Geomatics 2004, Montreal, Canada, October, 28-29. (Cd-Rom)
17. **Jabeur**, N., Moulin, B., Gbei, E.F. (2003) Une approche par compétition d'agents pour la résolution de l'encombrement spatial lors de la généralisation automatique des cartes. Journées Francophones des Systèmes Multi-Agents JFSMA-2003, Hammamet, Tunisie, novembre, 27-29 : 161-173.
18. Gbei, E.F., Cosma, I., Moulin, B., **Jabeur**, N. (2002) Modeling SVG and GML data for the Cartographic Generalization and the Multiple Representation on the web. International Conference SVG Open 2003, Vancouver, Canada, July 14. (Cd-Rom)
19. **Jabeur**, N., Moulin, B., Morse, B. (2002) Une approche multiagent pour la planification des trajectoires des navires sur le fleuve Saint-Laurent. Canadian Conference Geomatics 2002, Montreal, Canada, October, 30-31. (Cd-Rom)
20. Moulin, B., **Jabeur**, N., Morse, B. (2001) A Multi-Agent System Using a Model Simulating Environment Constraints for Ship Course Planning in the St. Lawrence River. International Symposium on Digital Earth, New Brunswick, Canada, June, 24-24. (Cd-Rom)

#### **IV Technical Reports:**

1. Jabeur, N., Sahli, N., Koné. M.T. (2004) Survey for UAVs and UCAVs mission. Rapport for Ministry of Defence (RDDC, Valcartier), Quebec.
2. Damaj, I., Iraqi, Y., Tannir, M., Jabeur, N., Hajjar, Sh., Khan, H. (2007) A review for the IT status at Dhofar University. Report for the University of Dhofar.

### **COMMUNITY SERVICES**

#### **I. Referee/Reviewer of Professional Publications:**

- Program committee member in the International Workshop on the Role of Services, Ontologies and Context in Mobile Environments RoSOC-M 2010
- Organizing committee member of the Third IFIP International Conference on New Technologies, Mobility and Security NTMS 2011
- Program committee member in the ACS/IEEE Workshop Future Trends on Ad-hoc and Sensor Networks (FT-ASN 2010)

- Program committee member in the International Workshop on the Role of Services, Ontologies and Context in Mobile Environments RoSOC-M 2009
- Co-chair of the 1<sup>st</sup> international workshop on Automated and Autonomous Sensor Networks (AASN), held in conjunction with the 5<sup>th</sup> IEEE International conference in Soft Computing and Transdisciplinary Science and Technology (CSTST'2008), October 26-30, 2008, Paris – France.
- Co-chair of the 2<sup>nd</sup> international workshop on Automated and Autonomous Sensor Networks (AASN), to be potentially held in conjunction with the International ACM Conference on Management of Emergent Digital EcoSystems (MEDES 2009), October 27-30, 2009, Lyon – France.
- Program committee member in the International Workshop on Service-Oriented Computing: Agents, Semantics, and Engineering (SOCASE 2008) in conjunction with the 7<sup>th</sup> International Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS 2008)
- Program committee member in the International Conference on Self-organization and Self-management in Computing and Communications (SSCC'08).
- Program committee member in the International Workshop on the Role of Services, Ontologies and Context in Mobile Environments RoSOC-M 2008
- Member of the organizing committee of the international workshop Workshop on Web Services and Geographic Information Systems (WSGIS'2007), held in conjunction with the 2<sup>nd</sup> IEEE International Conference on Digital Information Management (ICDIM'2007)
- Program committee member in the 20<sup>th</sup> Canadian Conference on Artificial Intelligence, Montreal, May 28-30 (2007)
- Program committee member in the International Workshop on Service-Oriented Computing: Agents, Semantics, and Engineering (SOCASE 2007) in conjunction with the 6<sup>th</sup> International Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS 2007)
- Member of the organizing committee of the international workshop AMTA'06 (Agent, Multiagent systems, from Theory to Practice), Quebec City, Canada, June, 05-06, 2006
- Program committee member in the international workshop on agent and multiagent systems, AMTA (2006)

## **II. Academic Committees:**

- Equivalence committee (DU/College of Technology, Salalah)
- Advisory committee, CAAS.
- Library committee, CAAS.
- Equivalence committee, CAAS.
- Research committee, CS.
- Curriculum committee, CS.
- Promotion committee, CS.
- Advisory committee, CS.
- Equivalence committee, CS.