

NAOUEL MOHA • GEODES - Group of Open and Distributed Systems,  
Experimental Software Engineering • DIRO, Université de Montréal • C.P. 6128,  
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# NAOUEL MOHA

## LANGUAGES

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French, English

## EDUCATION

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- Expected Dec 2008     **Ph.D. Program of Computer Science**, in cooperation between University of Montreal (CANADA) and University of Lille 1 (FRANCE)  
PhD thesis: *On the Automatic Detection and Correction of Design Defects in Object-Oriented Architectures*
- 2001 – 2002     **Master of Computer Science (DEA)**, Systems & Communication, Joseph Fourier University, IMAG, Grenoble, (FRANCE).
- 2000 – 2001     **Master of Computer Science (DESS)**, Information Systems, IMAG (Institute of Computer Science and Applied Mathematics), Grenoble, (FRANCE).
- 1996 – 2000     **Bachelor of Computer Science and Software Engineering**, Networks and Applications, Louis Pasteur University, Strasbourg (FRANCE).

## COMPUTER SKILLS

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- **Languages** : Java, C / C++, Delphi, Caml, Perl/CGI, HTML, PHP, JavaScript, Assembler, LaTeX
- **Database** : Oracle, MySQL
- **Software** : Office, HP OpenView, SNMP Manager, Rational Rose, Objectteering, Eclipse
- **Operating Systems** : J2EE, CORBA, Apache Web Server, Linux, Unix, Windows NT/XP, OS/400
- **Methodologies** : Merise, OMT/UML
- **Networks** : TCP/IP, UDP, ATM, Netware, FDDI, RNIS, Profibus, FIP, HDLC

## RESEARCH INTERESTS

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- Software Architecture Defects
- Object-oriented software maintenance
- Antipatterns definition, use, and identification
- Refactoring
- Human-Centered Software Systems Engineering

## RESEARCH PROJECTS

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- 2005 – Present     **Ptidej** (Pattern Trace Identification, Detection, and Enhancement in Java)  
GEODES - Group of Open and Distributed Systems, Experimental Software Engineering  
DIRO, University of Montreal (CANADA)
- Co-administrator of the research lab
  - Managing the project SAD (Software Architecture Defects)
- 2003 – 2004     **An Internet-based Environment for Remote Usability and Empirical Studies**  
HCSE group, Concordia University (Montreal, CANADA)  
Interaction and Cognition Lab team, University of Metz (FRANCE)
- Defining the usability testing process
  - Managing the implementation and validation of an online and wireless platform for the usability engineering via the Net

2001 - 2002

**HIT : Habitat Intelligent pour la Télésanté**

TIMC laboratory, AFIRM group

Joseph Fourier University, IMAG Institute, Grenoble, (FRANCE)

- Designed an information system and a generic model for remote monitoring systems in health smart homes.

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P U B L I C A T I O N S

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**Refereed Articles in International Conferences**

1. Naouel Moha, Yann-Gaël Guéhéneuc, Pierre Leduc. *Automatic Generation of Detection Algorithms for Design Defects*. Proceedings of the 21<sup>st</sup> IEEE/ACM International Conference on Automated Software Engineering (ASE 2006), September 18-22, 2006, Tokyo, Japan. To appear.
2. Ashraf Gaffar, Naouel Moha, Ahmed Seffah. *User-Centered Design Process Management and Communication*. Proceedings of HCII 2005 Human Computer Interaction International, Vol. CDROM, July 22-27, 2005, Las Vegas, Nevada, USA.

**Refereed Articles in French Journals**

3. V. Rialle, N. Noury, L. Bajolle, J. B. Lamy, G. Virone, F. Duchêne, N. Moha et J. Demongeot. *Le concept d'Habitat Intelligent pour la Santé: considérations techniques et scientifiques pour un service médico-social*. Revue de Gériatrie, vol. 28(5), pp. 403-416, 2003.

**Refereed Articles in National Conferences**

4. Naouel Moha, Duc-Loc Huynh, and Yann-Gaël Guéhéneuc. *Une taxonomie et un métamodèle pour la détection des défauts de conception*. In Roger Rousseau, editor, actes du 12e colloque Langages et Modèles à Objets, Hermès Science Publications, pp. 201-216, March 22-24, 2006, Nîmes, France.
5. Naouel Moha, Qing Li, Ashraf Gaffar, Ahmed Seffah. *Enquête sur les pratiques de tests d'utilisabilité*. IHM'05, 17<sup>ème</sup> Conférence Francophone sur l'Interaction Homme-Machine, pp. 115-120, September 27-30, 2005, Toulouse, France.
6. Naouel Moha, Qing Li, Ahmed Seffah, Gabriel Michel. *Towards a Platform for Usability Remote Tests via Internet*. OZCHI2004, Annual conference of the Computer-Human Interaction Special Interest Group of the Human Factors and Ergonomics, Vol. CDROM, November 22-24, 2004, University of Wollongong, Australia.

**Book Chapters**

7. Naouel Moha, Ashraf Gaffar, and Gabriel Michel. *Remote Usability Evaluation of Web Interfaces*. Human Computer Interaction Research in Web Design and Evaluation. Edited by: P. Zaphiris, Sri Kurniawan, Publisher Idea Group Inc. [To appear in September 2006].

**Workshop Papers**

8. Naouel Moha. *Detection and Correction of Design Defects in Object-Oriented Architectures*. Doctoral Symposium, 20<sup>th</sup> edition of the European Conference on Object-Oriented Programming (ECOOP 2006), July 3-7, 2006, Nantes, France.
9. Naouel Moha and Saliha Bouden and Yann-Gaël Guéhéneuc. *Correction of High-Level Design Defects with Refactorings*. Proceedings of the 7<sup>th</sup> International ECOOP Workshop on Object-Oriented Reengineering, July 4, 2006, Nantes, France.
10. Naouel Moha, Duc-Loc Huynh, Yann-Gaël Guéhéneuc. *A Taxonomy and a First Study of Design Pattern Defects*. Proceedings of the STEP International Workshop on Design Pattern Theory and Practice, September 25-30, 2005, Budapest, Hungary.
11. Ashraf Gaffar and Naouel Moha. *Semantics of a Pattern System*. Proceedings of the STEP International Workshop on Design Pattern Theory and Practice, September 25-30, 2005, Budapest, Hungary.
12. Naouel Moha and Yann-Gaël Guéhéneuc. *On the Automatic Detection and Correction of Software Architectural Defects in Object-Oriented Designs*. Proceedings of the 6<sup>th</sup> ECOOP Workshop on Object-Oriented Reengineering, July 25-29, 2005, Universities of Glasgow and Strathclyde, Glasgow, UK.

## Master Thesis

13. Naouel Moha. *Definition of a generic model for telemonitoring systems in health smart homes*. Master's thesis. 2002, Joseph Fourier University of Grenoble, France.

## Tool Demo

14. Yann-Gaël Guéhéneuc, Jean-Yves Guyomarc'h, Duc-loc Huynh, Olivier Kaczor, Naouel Moha, and Samah Rached. *Ptidej: A Tool Suite*. IBM CASCON 2005, October, 17-20, 2005, Toronto, Canada.

## Talks

15. Naouel Moha. *Une taxonomie et un métamodèle pour la détection des défauts de conception*. Université de Lille I, laboratoire LIFL, May 15, 2006.
16. Naouel Moha, Duc-Loc Huynh, Yann-Gaël Guéhéneuc. *Une taxonomie et un métamodèle pour la détection des défauts de conception*. Université de Montréal, laboratoire GEODES, February 8, 2006.
17. Naouel Moha. *Une enquête sur la conduite des tests d'utilisabilité*. Utilisabilité Québec, Chapitre québécois du "Usability Professionals'Association", February 22nd, 2005. <http://www.upa-mtl.org/archives.htm>.
18. Naouel Moha. *Vers une plateforme pour les tests d'utilisabilité à distance via Internet*. Ecole Centrale de Lyon, Sept 2004.
19. Naouel Moha. *Vers une plateforme pour les tests d'utilisabilité à distance via Internet*. Utilisabilité Québec, Chapitre québécois du "Usability Professionals'Association", July 15th, 2005. <http://www.upa-mtl.org/archives.htm>

## Poster

20. Naouel Moha. *A Systematic Method for the Detection and Correction of Design Defects*. Poster. Proceedings of the 20<sup>th</sup> edition of the European Conference on Object-Oriented Programming (ECOOP 2006), July 3-7, 2006, Nantes, France.

## RESEARCH ACTIVITIES

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2004 - 2006

### Student Volunteer

- At the 20<sup>th</sup> edition of the European Conference on Object-Oriented Programming (ECOOP 2006), July 3-7, 2006, Nantes (FRANCE).
- At the 20<sup>th</sup> Annual ACM SIGPLAN Conference on Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA 2005), October 16-20, 2005, San Diego, California (USA).
- At the NIST Workshop on Formative Testing, October 18-19, 2004, Boston (USA).

July 2005

**Reviewer** of an article submitted in the 20<sup>th</sup> IEEE/ACM International Conference on Automated Software Engineering (ASE 2005), November 7-11, 2005, Long Beach, California (USA).

## RELATED EXPERIENCE

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2002 – 2003

### Analyst Engineer

EGERIE S.A. Company, Luxembourg (LUXEMBOURG)

- Marketed and produced reports of project management
- Constructed a graphic user interface in DELPHI 7 for managing companies logistics
- Produced detail specifications, defined and executed test plans and coded modules for logistics management software

2000 - 2001

### Software Developer

BULL Echirolles, Grenoble, (FRANCE)

- Participated in the architecture definition of a system for secure access from remote nomads to the local area network of the company
- Participated in the implementation in JAVA / C with SSL encryption

1999 - 2000

**Web Developer**

CBSI (Complete Business Solutions Inc), Bruxelles (BELGIUM)

- Participated in the analysis, specifications, design and implementation of a recruitment information system: Management of job application documents including resumes and candidate assessments.
- Designed and implemented the intranet of the recruitment service in PHP/MySQL

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2005 - 2006

**Lab co-administrator**

GEODES Laboratory, DIRO, University of Montreal, (CANADA)

- In charge of installing software and co-administrating right accesses on computers
- In charge of maintaining the research group's website and managing the equipment

2005 - 2006

**Assistant Teacher** in Software Development and Maintenance (Fall 2005) and in Software Quality and Metrics (Winter 2006)

University of Montreal, (CANADA)

- In charge of giving the lab work and managing the lab project

2004 - 2005

**Assistant Teacher** in C++ and Java programming language

Concordia University, Montreal, (CANADA)

- In charge of giving the lecturers and lab work
- Assisted students with programming

2003 - 2004

**Research Assistant**

Usability and Empirical Studies Laboratory,  
Concordia University, Montréal (CANADA)

- Supervising Master students
- Managing the RANA (Remote Architecture for Net-Based Analysis) project

2003

**External Lecturer** in Networks, TCP/UDP Sockets

University of Metz, (FRANCE)

- In charge of leading the computing laboratories
- Assisted students with programming and software/networks questions

2002

**Lecturer** in C programming language

Joseph Fourier Academic Institute of Technology, Grenoble, (FRANCE)

- In charge of giving the lecturers and supervising computing laboratories
- Assisted students with programming

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I N T E R E S T S

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- Reading/writing, cinema, poetry, running, handball

**References Available Upon Request**

Montreal, July 10<sup>th</sup>, 2006