

Grégory BATT

Home: 6, route du Loula,
La Faurie
38770 La Motte d'Aveillans, France

Phone: 33 (0)4 76 30 93 75

Office: INRIA Rhône-Alpes
655 avenue de l'Europe
Montbonnot
38334 Saint Ismier, France
Phone: 33 (0)4 76 61 53 72
Fax: 33 (0)4 76 61 54 08

Email: gregory.batt@inrialpes.fr
gregory.batt@ens-lyon.org

www: <http://www-helix.inrialpes.fr/article180.html>

Citizenship: French

Born on February 23rd, 1977, in Maubeuge (France)

Work experience

- PhD student (Sept. 2002 - present): Analysis and verification of qualitative models of genetic regulatory networks. PhD student in computer science at the Université Joseph Fourier in Grenoble, France, under supervision of Hidde de Jong, in the HELIX research group at INRIA Rhône-Alpes.
- Lab training period (Jan. 2002 - Aug. 2002): Validation of genetic regulatory networks. 'DEA Informatique: Systèmes et Communication' at the Université Joseph Fourier in Grenoble, France, under supervision of Hidde de Jong, in the HELIX research group at INRIA Rhône-Alpes.
- Lab training period (Jun. 2001 - Aug. 2001): Representation of protein/protein interactions in qualitative models of genetic regulatory networks. 'Licence' of the 'Magistère d'Informatique et Modélisation' at the Ecole Normale Supérieure de Lyon, France, under supervision of Hidde de Jong, in the HELIX research group at INRIA Rhône-Alpes.
- Lab training period (Jun. 1999 - Aug. 1999): Discovering interactions between cytoskeletal proteins using double hybrid techniques. 'Licence' of the 'Magistère de Biologie Moléculaire et Cellulaire' at the Ecole Normale Supérieure de Lyon, France, under supervision of Laurent Mazzolini, in the 'Pharmacologie et Dynamique du Cytosquelette Microtubulaire' research group at the Institut de Pharmacologie et de Biologie Structurale, Toulouse, France.
- Teaching (sept 2002 - present): teaching assistant in basic computer science and programming courses in 'Licence Sciences et Technologies' and in courses on modeling and simulation of genetic regulatory networks in 'Master Sciences, Technologies et Santé' at the Université Joseph Fourier in Grenoble, France.

Education

- 2002-present: PhD student in computer science at the Université Joseph Fourier in Grenoble. PhD advisor: Hidde de Jong, in the HELIX research group at INRIA Rhône-Alpes.
- 2001-2002: DEA Informatique: Systèmes et Communication at the Université Joseph Fourier in Grenoble, France.
- 2000-2001: ‘Licence’ of the ‘Magistère d’Informatique et Modélisation’ at the Ecole Normale Supérieure de Lyon, France.
- 1998-2000: ‘Licence’ and ‘Maîtrise’ of the ‘Magistère de Biologie Moléculaire et Cellulaire’ at the Ecole Normale Supérieure de Lyon, France. ERASMUS student at Uppsala University, Sweden.
- 1995-1998: General scientific preparation for the ‘Grandes Ecoles’ at the Lycée Pierre de Fermat in Toulouse, France (BioMathSup and BioMathSpé). Admitted to the Institut National Agronomique de Paris-Grignon and to the Ecole Normale Supérieure de Lyon.

References

- [1] G. Batt, D. Ropers, H. de Jong, J. Geiselman, R. Mateescu, M. Page, and D. Schneider. Analysis and verification of qualitative models of genetic regulatory networks: A model-checking approach. In *Nineteenth International Joint Conference on Artificial Intelligence, IJCAI 2005*, Edinburgh, United Kingdom, 2005. Accepted.
- [2] G. Batt, D. Ropers, H. de Jong, J. Geiselman, R. Mateescu, M. Page, and D. Schneider. Validation of qualitative models of genetic regulatory networks by model checking : Analysis of the nutritional stress response in *Escherichia coli*. In *6èmes Journées Ouvertes Biologie Informatique Mathématiques, JOBIM 2005*, Lyon, France, 2005. Accepted.
- [3] G. Batt, D. Ropers, H. de Jong, J. Geiselman, R. Mateescu, M. Page, and D. Schneider. Validation of qualitative models of genetic regulatory networks by model checking : Analysis of the nutritional stress response in *Escherichia coli*. *Bioinformatics*, 21(Suppl.1):i19–i28, 2005. Presented at ISMB’05.
- [4] G. Batt, R. Casey, H. de Jong, J. Geiselman, J.-L. Gouzé, M. Page, D. Ropers, T. Sari, and D. Schneider. Qualitative analysis of the dynamics of genetic regulatory networks using piecewise-linear models. In E. Pecou, S. Martinez, and A. Maass, editors, *Mathematical and Computational Methods in Biology*, Nonlinear Phenomena and Complex Systems. Kluwer Academics Publishers, 2005. In press.

- [5] G. Batt, D. Ropers, H. de Jong, J. Geiselmann, M. Page, and D. Schneider. Qualitative analysis and verification of hybrid models of genetic regulatory networks: Nutritional stress response in *Escherichia coli*. In M. Morari and L. Thiele, editors, *Eighth International Workshop on Hybrid Systems: Computation and Control, HSCC 2005*, volume 3414 of *Lecture Notes in Computer Science*, pages 134–150. Springer, 2005.
- [6] G. Batt, H. de Jong, J. Geiselmann, M. Page, D. Ropers, and D. Schneider. Symbolic reachability analysis of genetic regulatory networks using qualitative abstraction. Technical Report RR-5362, INRIA Rhône-Alpes, 2004.
- [7] G. Batt, D. Bergamini, H. de Jong, H. Garavel, and R. Mateescu. Model checking genetic regulatory networks using GNA and CADP. In S. Graf and L. Mounier, editors, *Eleventh International SPIN Workshop on Model Checking Software*, volume 2989 of *Lecture Notes in Computer Science*, pages 158–163. Springer, 2004.
- [8] G. Batt, H. de Jong, J. Geiselmann, and M. Page. Analysis of genetic regulatory networks: a model-checking approach. In P. Salles and B. Bredeweg, editors, *Proceedings of the Seventeenth International Workshop on Qualitative Reasoning, QR 2003*, pages 31–38, Brasilia, Brazil, 2003.
- [9] G. Batt, H. de Jong, J. Geiselmann, and M. Page. Analysis of genetic regulatory networks: a model-checking approach. In M. Benerecetti and C. Pecheur, editors, *Working Notes of the Second Workshop on Model Checking and Artificial Intelligence, MoChArt 2003*, pages 51–58, Acapulco, Mexico, 2003.
- [10] H. de Jong, J. Geiselmann, G. Batt, C. Hernandez, and M. Page. Qualitative simulation of the initiation of sporulation in *Bacillus subtilis*. *Bulletin of Mathematical Biology*, 66(2):261–299, 2004.
- [11] G. Batt. Representation of protein/protein interactions in the framework of a method for modeling genetic networks. Technical Report RR-4382, INRIA Rhône-Alpes, 2002.