# Maxime Folschette

3<sup>rd</sup> Year PhD Student in Bioinformatics

#### **EDUCATION**

Since Oct. **PhD student in bioinformatics**, MENRT (ministry grant)

2011 • Team: **MeForBio** (Formal Methods for Bioinformatics)

- Subject: Algebraic modeling of multi-scale evolution and dynamics of biological regulatory networks
- Keywords: Formal Methods, Biological Regulatory Networks, Parameters Inference
   École Centrale de Nantes (Nantes, France) Laboratory: IRCCyN Team: MeForBio
- 2011 Double diploma at the **École Centrale de Nantes** engineering school:
- 2008–2011 Engineering diploma

Options: Computer Science and Research & Development

• Master thesis in Automatics, Production Systems and Real Time Subject: Applying the Hoare logic to gene regulatory networks

École Centrale de Nantes (Nantes, France)

2006–2008 Classes Préparatoires aux Grandes Écoles (MPSI/MP), intensive courses in maths and sciences
June 2006 Baccalauréat S, equiv. A levels

Lycée Jacques Amyot (Melun, France)

### PUBLICATIONS IN CONFERENCES AND WORKSHOPS

- M. Folschette, L. Paulevé, M. Magnin and O. Roux: Under-approximation of reachability in multivalued asynchronous networks, in: Proceedings of the fourth International Workshop on Interactions between Computer Science and Biology, editors: E. Merelli and A. Troina, Electronic Notes in Theoretical Computer Science, Vol. 299, 33–51, Springer Berlin Heidelberg, June 2013, DOI 10.1016/j.entcs.2013.11.004.
- M. Folschette, L. Paulevé, K. Inoue, M. Magnin and O. Roux: Concretizing the process hitting into biological regulatory networks, in: Computational Methods in Systems Biology, editors: D. Gilbert and M. Heiner, 166–186, Springer Berlin Heidelberg, October 2012, DOI 10.1007/978-3-642-33636-2\_11. Acceptance rate: 37%.
- M. Folschette, L. Paulevé, K. Inoue, M. Magnin and O. Roux: Abducing Biological Regulatory Networks from Process Hitting models, in: ECML-PKDD 2012 Workshop on Learning and Discovery in Symbolic Systems Biology, editors: O. Ray and K. Inoue, 24–35, September 2012.

## **PUBLICATIONS IN THEMATIC SCHOOLS**

- M. Folschette: Introduction to the Process Hitting and inference of its underlying Biological Regulatory Network, *Advances in Systems and Synthetic Biology*, student session, 43–52, March 2013.
- M. Folschette: Inferring Biological Regulatory Networks from Process Hitting models, Modeling and Verifying Parallel Processes, student session, 91–97, December 2012.

#### **WORK & RESEARCH EXPERIENCE**

March-May 2012 Subject: Inferring a biological regulatory network from a process hitting model using ASP
National Institute of Informatics (Tokyo, Japan) — Team: Inoue Laboraoty

April-Sept. Master internship in the MeForBio team at the IRCCyN
2011 Application of the Master subject in Coq, OCaml and Prolog IRCCyN (Nantes, France)

May-August Mid-term studies internship in the Diagnostics team at EFDA-JET (nuclear fusion research)
2010 Subject: Statistical processing on magnetic coils measurements to bring out modeling flaws
EFDA-JET: Joint European Torus (Culham Science Centre, UK)

## **PERSONAL SKILLS**

Computing Languages: OCaml, ASP, Coq, C, C++, Java, Maple, Matlab, SQL, Python, QBasic

Other skills: Latex, Linux command line

Languages French: Native speaker

English: Fairly fluent, TOEIC with 870 points in 2009