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Education

- 2010 **PhD Student at Laboratoire Spécification et Vérification, in École Normale Supérieure de Cachan** under the supervision of Benedikt Bollig and Paul Gastin
- 2006-2010 **Student at the ENS de Cachan**
- 2009-2010 **Master's degree (M2) in Computer Science with high distinction, MPRI** (Parisian Master for Research in Computer Science)
 - Master internship supervised by Benedikt Bollig, Paul Gastin and Marc Zeitoun** LSV (ENS Cachan), *Quantitative properties of trees and applications to XML query languages*
 - 2008-2009 **Agrégation examination in Mathematics and Computer Science**
Rank: 45 (over 252)
 - 2007-2008 **Master 1 in Computer Science with high distinction, MPRI**
 - Summer internship supervised by Rupak Majumdar** University of California, Los Angeles, *Verification of multi-thread programs*
 - 2007-2008 **Master 1 in Mathematics with high distinction, University Paris VII**
 - 2006-2007 **B.Sc (L3) in Computer Science with high Distinction**
 - Summer internship supervised by Johan Montagnat** Team Rainbow of I3S in Sophia Antipolis (06), *Validation of non-rigid registration algorithms applied to medical images*
 - 2006-2007 **B.Sc (L3) in Mathematics with distinction**
- 2003-2006 **Preparation for the competitive entrance examinations to French Engineering Schools** *Intensive three-year university-level programme, Lycée Descartes in Tours (37)*
- 2003 **Baccalaureat with Scientific orientation with Specialization in Mathematics with highest honors, Lycée Notre-Dame-la-Riche in Tours (37)**

Publications

JOURNAL ARTICLES

- [GMM12] Pierre Ganty, Rupak Majumdar, and Benjamin Monmege. **Bounded Underapproximations**. *Formal Methods in System Design*, 2012. To appear.

INTERNATIONAL CONFERENCES

- [BGMZ10] Benedikt Bollig, Paul Gastin, Benjamin Monmege, and Marc Zeitoun. **Pebble weighted automata and transitive closure logics**. In Samson Abramsky, Friedhelm Meyer auf der Heide, and Paul Spirakis, editors, *Proceedings of the 37th International Colloquium on Automata, Languages and Programming (ICALP'10)*, Lecture Notes in Computer Science, pages 587–598. Springer, 2010.
- [GMM10] Pierre Ganty, Rupak Majumdar, and Benjamin Monmege. **Bounded Underapproximations**. In Byron Cook, Paul Jackson, and Tayssir Touili, editors, *Proceedings of the 22nd International Conference on Computer Aided Verification (CAV'10)*, Lecture Notes in Computer Science. Springer, 2010.

THESES

- [Mon07] Benjamin Monmege. *Validation of non-rigid registration algorithms applied to medical images*. Licence 3 Internship in Rainbow Team, Polytech'Nice Sophia Antipolis (France), ENS de Cachan, 2007. In French.
- [Mon08] Benjamin Monmege. *Parikh-equivalent bounded languages for software verification*. Master 1 Internship in UCLA (USA), ENS de Cachan, 2008.
- [Mon10] Benjamin Monmege. *Propriétés quantitatives des mots et des arbres. Applications aux documents XML. (In french)*. Master's thesis, MPRI, ENS de Cachan, 2010.

TECHNICAL REPORTS

- [BGMZ10] Benedikt Bollig, Paul Gastin, Benjamin Monmege, and Marc Zeitoun. *Pebble weighted automata and transitive closure logics*. Research Report LSV-10-06, LSV, ENS de Cachan, 2010.
- [BGMZ11] Benedikt Bollig, Paul Gastin, Benjamin Monmege, and Marc Zeitoun. *Weighted Expressions and DFS Tree Automata*. Research Report LSV-11-08, LSV, ENS de Cachan, 2011.
- [GMM10] Pierre Ganty, Rupak Majumdar, and Benjamin Monmege. *Bounded Underapproximations*. Technical report, UCLA, IMDEA, ENS de Cachan, 2010.

OTHER PUBLICATIONS

2008-2011: Redaction of corrections of Computer Science and Mathematics examinations for H&K Editions

Recent talks

- | | |
|----------------|---|
| October 2011 | Seminar Modelisation and Verification LaBRI Bordeaux. <i>Weighted Expressions and Pebble Automata over Nested Words and Trees</i> |
| February 2011 | Meeting Quasimodo Project Saarbrücken. <i>Weighted Depth-First-Search Automata</i> . |
| September 2010 | Master 2 defense MPRI (Paris) <i>Propriétés quantitatives des mots et des arbres. Applications aux documents XML</i> . |
| July 2010 | International Colloquium on Automata, Languages and Programming (ICALP'10) Bordeaux. <i>Pebble weighted automata and transitive closure logics</i> . |
| May 2010 | Weighted Automata: Theory and Applications Leipzig. <i>Pebble weighted automata and transitive closure logics</i> . |

Teaching

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|-----------|---|
| 2011-2012 | Practical Sessions Machine Learning Computer Science Department, ENS de Cachan |
| 2010-2011 | Preparation to agregation of Mathematics, Computer Science Computer Science Department, ENS de Cachan
Courses/Practical Sessions Algorithmics
Courses/Practical Sessions Formal Languages
Practical Sessions for C programming EEA Department, ENS de Cachan |
| 2009-2010 | Practical work in Computer Science Lycée Henri IV in Paris |
| 2004-2006 | Tutor giving Mathematics and Physics lessons to students between 11 and 18 years old |

Ph.D Study Activities

September 2011 **Games Workshop 2011** Paris. *Organizer: Dietmar Berwanger*
May 2011 **37ème École de Printemps d'Informatique Théorique** Carcans-Maubuisson
Organizers: Hugo Gimbert, Igor Walukiewicz
May 2010 **Weighted Automata: Theory and Applications** Leipzig. *Organizers: Manfred Droste, Werner Kuich, Paul Gastin, Heiko Vogler*
March 2010 **Quantitative Model Checking** Copenhagen. *Organizers: Members of the European Network of Excellence ARTIST and MT-LAB*

Computer skills

OCaml, C, C++, UPPAAL, L^AT_EX 2_ε, Assembly language

Languages

French: mother tongue
English: advanced, written and spoken
German: intermediate level

Personal interests

Jury for the literary prize of the *École Normale Supérieure de Cachan*
Running, Swimming
Cinema, Piano playing, Reading, Theater going