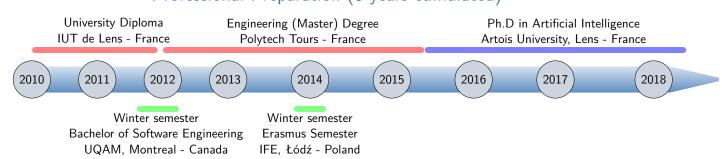
Valentin Montmirail



Ph.D Candidate - Artificial Intelligence

Job in R&D in Artificial Intelligence

Professional Preparation (8 years cumulated)



Experiences inside companies (4 years, 3 months cumulated)

CRIL, Artois University

Lens, France

Ph.D Candidate (3 years)

Oct.'15 - Dec.'18

Ph.D Thesis under the supervison of Daniel Le Berre, co-supervised by Jean-Marie Lagniez and Tiago de Lima. We worked during these 3 years on how to solve efficiently in practice, modal logic satisfiability problems. Worth noticing that during these years we developed the framework RECAR.

Atos Wrocław

Wrocław, Poland

Java EE Developer (5 months)

May '15 - Sept. '15

My role as a Java EE Developer (with French knowledge) was to design and implement a software in Java technologies and work on projects with French-speaking clients.

Atos Worldline

Tours, France

JavaEE Developer (3 months)

Aug. '14 - Sept. '14

Perform the comparison and merging management projects prepaid accounts and receipts of items to achieve a complete software, generic and reusable.

Axa Assistance

Montreal, Canada

PHP/Zend Developer (4 months ∧ 3 months)

Jun. '13 − Aug. '13 ∧ May. '12 − Aug. '12

Internship at AXA Assistance Canada, to create an internal website in PHP 5.3 and Zend Framework, the goal was the merger of several existing websites so that field agents no longer uses a single intranet to access everything they need.

Experiences in entrepreneurship (2 years, 8 months cumulated)

Simply'Creat (1 year, 7 months) Jan.'14 – Aug.'15

Joué-les-Tours, France

gPartner

HTML5/CSS3 Developer (2 months) July '15 - Aug. '15

I was working with 2 companies on the same website of a very famous company in the luxe industry to integrate in HTML5 the desktop and mobile versions of their Photoshop design.

CHRU of Tours

Tours, France

Paris, France

Project Manager (4 months) Dec. '14 – Mar. '15

The goal of this project was to realize a web platform who allow different hospitals to upload their DICOM files in an anonymous way. Theses DICOM files contains the patient's name. To fix this problem, we developed and integrated a JavaFX application to anonymize theses files.

ImmoJeune Paris, France

PHP/Symfony 2 Developer (2 months) Aug. '14 - Sept. '14

Performing an integratable Iframe on all partners of Immojeune. I co-managed the development in Symfony 2 and the versioning (git).

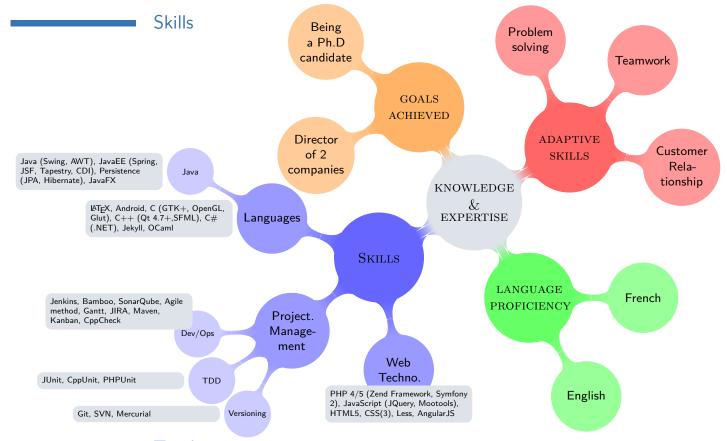
Auto-Entreprise (1 year, 1 month) Fev.'13 – Mar.'14

Tours, France

Axa Assistance Montreal, Canada

PHP/Zend Developer in teleworking (1 year, 1 month) Fev.'13 – Mar.'14

Merging serveral existing webistes that agents in Axa were using into one big website to access everything.



Teaching

- Algorithm (8h) Teaching first year students algorithms for 8 hours. We discover the concepts of: Linked List simple, Linked List double, Array multi-dimensions and Heap. We used the C++ to put these concept in practice.
 - C++ (12h) The first year students start to manipulate C++ in a more advanced way for 12 hours. Manipulating pointers, recursivity...
- C++/SFML (48h) Manipulation for the first year students of the Human-Machine interfaces in C++. We practiced the SFML library for 48 hours.
- GNU/Linux (48h) During 48 hours, we practice how to use the shell and how to write shell script to perform a task. Using Fedora 18 and bash for the shell.
 - Java (48h) During 48 hours, we emulate the behavior of an assembly language in Java, with full manipulation of the memory.

Awards and Honours

Innovation Price at Doctoriales'17

First place in the competition of Innovation on the theme of Mobility in a team of 8 members against 8 other teams. We created a fake company, shown that it was viable, and technologically innovative in 72 hours. This company was able to create and sell an unified subscription card (Ubicarte) for the National Transport in France.

Research Development

AAR website In Jekyll/Markdown. The website of the Assocation for Automated Reasoning http://aarinc.org/

CADE website In Jekyll/Markdown. The website of the CADE Conference http://www.cadeinc.org/

IJCAR website In Jekyll/Markdown. The website of the IJCAR Conference http://www.ijcar.org/

MoSaiC solver In C++. A modal logic K Satisfiability Solver using the RECAR framework http://www.cril.univ-

artois.fr/~montmirail/mosaic/

S52SAT solver In C++. A modal logic S5 Satisfiability Solver able to give in output the S5-model

http://www.cril.univ-artois.fr/~montmirail/s52SAT/

MDK-Verifier In C++. A checker of satisfiability of a Kripke model in modal logic K http://www.cril.univ-

artois.fr/~montmirail/mdk-verifier/

Interests

Traveling Québéc (8 months + 3 months), Poland (5 months + 5 months)

Conferences Coimbra, Portugal (1 week); Montpellier, France (1 week); San Francisco (CA, USA) (1 week); Montreuil-Sur-Mer, France (1 week); Caen, France (1 week); Melbourne, Australia (2 weeks),

Publications (author names are always in alphabetical order)

[CLL⁺17a] Thomas Caridroit, Jean-Marie Lagniez, Daniel Le Berre, Tiago de Lima, and Valentin Montmirail. A SAT-based approach for solving the modal logic S5 satisfiability problem. In *Proceedings of the 31st AAAI Conference on Artificial Intelligence (AAAI 2017)*, pages 3864–3870, February

2017.

[CLL+17b] Thomas Caridroit, Jean-Marie Lagniez, Daniel Le Berre, Tiago de Lima, and Valentin Montmirail.

Une approche basée sur SAT pour le problème de satisfiabilité en logique modale S5. In *Actes des 13es journées Francophones de Programmation par Contraintes (JFPC 2017*), pages 45–53,

June 2017.

[DDM17] Thibault Defourneau, Florent Dewez, and Valentin Montmirail. Le Jeu du Lights Out : une

approche visuelle des mathématiques au travers d'un atelier. MathemaTICE: Volume 54, March

2017.

[LLdLM16a] Jean Marie Lagniez, Daniel Le Berre, Tiago de Lima, and Valentin Montmirail. On Checking

Kripke Models for Modal Logic K. In 5th Workshop on Practical Aspects of Automated

Reasoning (PAAR@IJCAR'16), pages 69-81, June 2016.

[LLdLM16b] Jean-Marie Lagniez, Daniel Le Berre, Tiago de Lima, and Valentin Montmirail. À propos de la

vérification de modèles en logique modale K. In Actes des 10es Journées d'Intelligence Artificielle

Fondamentale (JIAF'16), pages 149–157, June 2016.

[LLdLM17a] Jean-Marie Lagniez, Daniel Le Berre, Tiago de Lima, and Valentin Montmirail. A Recursive

Shortcut for CEGAR: Application To The Modal Logic K Satisfiability Problem. In *Proceedings* of the 26th IJCAI International Joint Conference on Artificial Intelligence (IJCAI 2017), pages

?--?, August 2017.

[LLdLM17b] Jean-Marie Lagniez, Daniel Le Berre, Tiago de Lima, and Valentin Montmirail. Un raccourci récursif pour CEGAR : Application au problème de satisfiabilité en logique modale K. In *Actes*

des 11es Journées d'Intelligence Artificielle Fondamentale (JIAF 2017), pages ?—?, July 2017.