

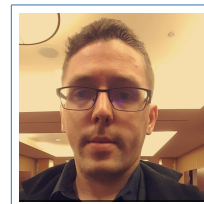
# Valentin Montmirail

Ph.D Candidate - Artificial Intelligence

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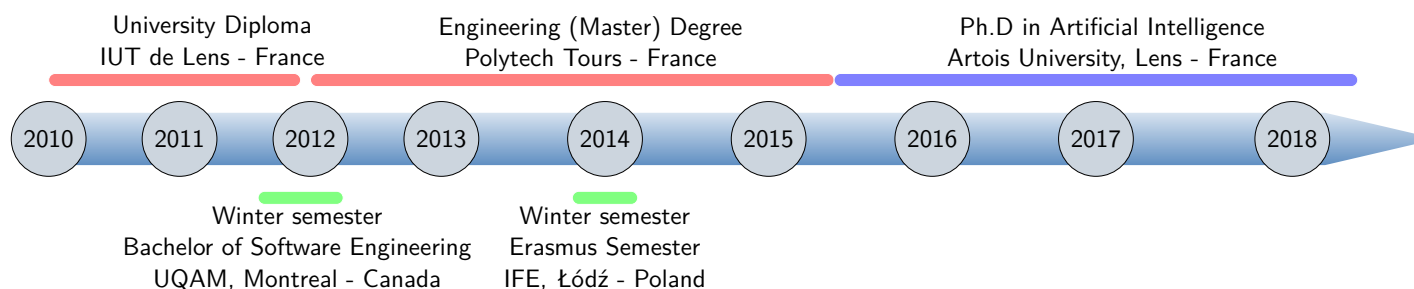
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## Job in R&D in Artificial Intelligence

### 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 supervision 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

WROCLAW, 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 use 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**

PARIS, FRANCE

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

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. These DICOM files contain the patient's name. To fix this problem, we developed and integrated a JavaFX application to anonymize these 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

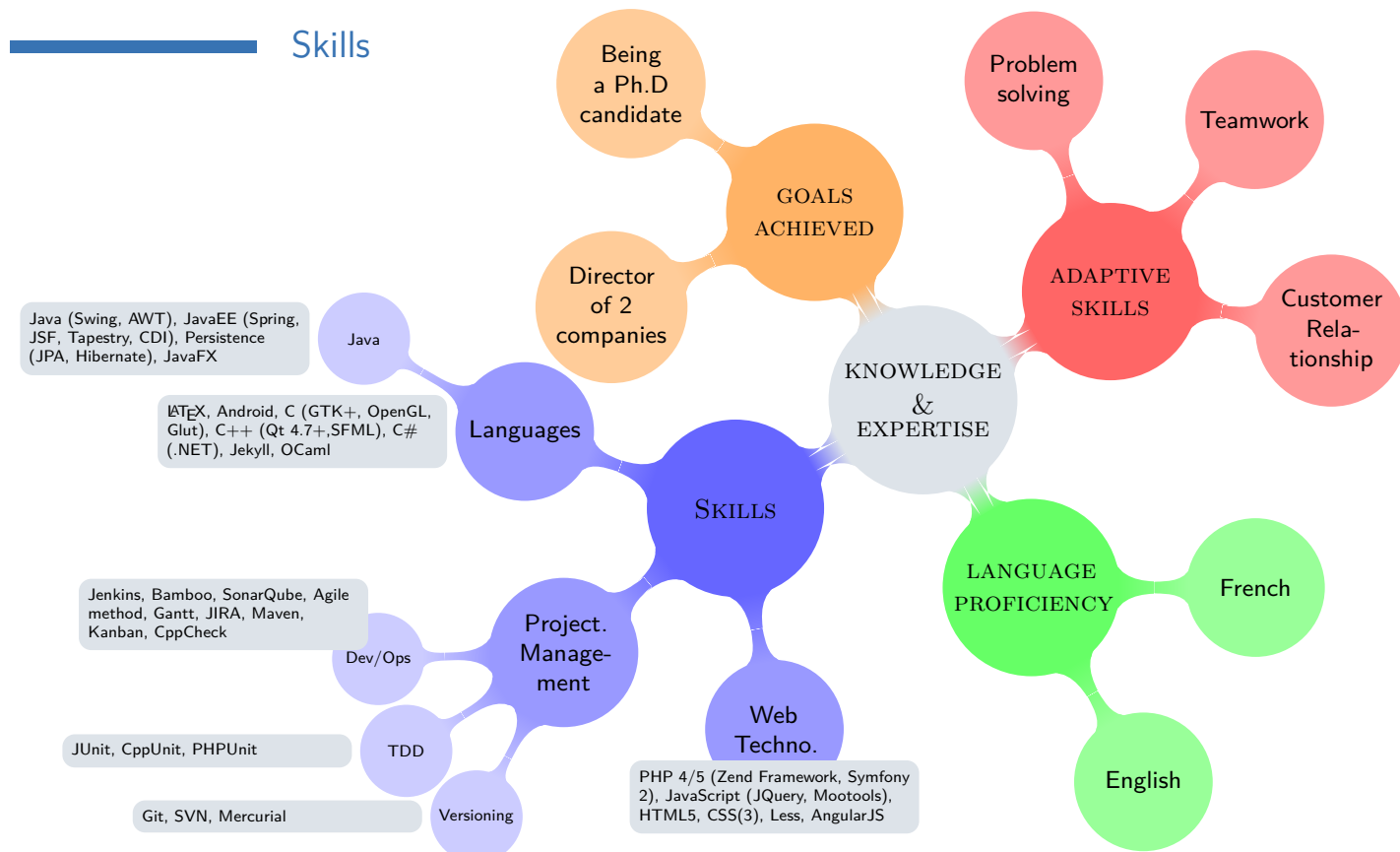
TOURS, FRANCE

## Axa Assistance

MONTREAL, CANADA

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

Merging several existing websites 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.

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## Research Development

AAR website	In Jekyll/Markdown. The website of the Association for Automated Reasoning <a href="http://aarinc.org/">http://aarinc.org/</a>
CADE website	In Jekyll/Markdown. The website of the CADE Conference <a href="http://www.cadeinc.org/">http://www.cadeinc.org/</a>
IJCAR website	In Jekyll/Markdown. The website of the IJCAR Conference <a href="http://www.ijcar.org/">http://www.ijcar.org/</a>
MoSaiC solver	In C++. A modal logic K Satisfiability Solver using the RECAR framework <a href="http://www.cril.univ-artois.fr/~montmirail/mosaic/">http://www.cril.univ-artois.fr/~montmirail/mosaic/</a>
S52SAT solver	In C++. A modal logic S5 Satisfiability Solver able to give in output the S5-model <a href="http://www.cril.univ-artois.fr/~montmirail/s52SAT/">http://www.cril.univ-artois.fr/~montmirail/s52SAT/</a>
MDK-Verifier	In C++. A checker of satisfiability of a Kripke model in modal logic K <a href="http://www.cril.univ-artois.fr/~montmirail/mdk-verifier/">http://www.cril.univ-artois.fr/~montmirail/mdk-verifier/</a>

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## Interests

Traveling	Québec (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),

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## Publications (author names are always in alphabetical order)

[CLB <sup>+</sup> 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 <i>Proceedings of the 31st AAAI Conference on Artificial Intelligence (AAAI 2017)</i> , pages 3864–3870, February 2017.
[CLB <sup>+</sup> 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 <i>Actes des 13es journées Francophones de Programmation par Contraintes (JFPC 2017)</i> , 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. <i>MathemaTICE: Volume 54</i> , March 2017.
[LBdLM16a]	Jean Marie Lagniez, Daniel Le Berre, Tiago de Lima, and Valentin Montmirail. On Checking Kripke Models for Modal Logic K. In <i>5th Workshop on Practical Aspects of Automated Reasoning (PAAR@IJCAR'16)</i> , pages 69–81, June 2016.
[LBdLM16b]	Jean-Marie Lagniez, Daniel Le Berre, Tiago de Lima, and Valentin Montmirail. À propos de la vérification de modèles en logique modale K. In <i>Actes des 10es Journées d'Intelligence Artificielle Fondamentale (JIAF'16)</i> , pages 149–157, June 2016.
[LBdLM17a]	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 <i>Proceedings of the 26th IJCAI International Joint Conference on Artificial Intelligence (IJCAI 2017)</i> , pages ?–?, August 2017.
[LBdLM17b]	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 <i>Actes des 11es Journées d'Intelligence Artificielle Fondamentale (JIAF 2017)</i> , pages ?–?, July 2017.