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(27 year old)
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Guillaume Perez

Education

2017 – **Postdoctoral position - Artificial Intelligence.**
Cornell University, USA.

2014 – 2017 **PhD in computer science - Constraint Programming.**
University Nice Sophia Antipolis, France.
Development and implementation of efficient algorithms for compression using Multivalued Decision Diagrams (MDDs) with application in constraint programming, in text and music generation and statistics constraints.

2012 – 2014 **Master degree in computer science.**
University Nice Sophia Antipolis, France.
Promotion leader.

Experiences

2013-2017
(4 years) **Teaching.**
University Nice Sophia Antipolis, Sophia-Antipolis, France.
During 4 years, I teached C++ advanced programming, Problem solving, Web Server, R and HTML-CSS. Moreover, I teached Python and JEE in several companies.

2012-2014
(2+3+6 months) **Three Constraint programming internships.**
I3S laboratory, Sophia-Antipolis, France.
The first internship focus on the development of dynamic user interface using features models for the YOURCAST project. The second internship focus on constraint programming, in the development of many Table algorithms. In addition with a study of data structures used in compression. The third one is about the design and implementation of MDD and Table propagators. The MDD one is now the State of the art for MDDs in many CP solvers - Published in CP14.

Research

2017 **MDDs : Sampling and Probability Constraints.**
Guillaume Perez and Jean-Charles Régin.
Constraint Programming (CP). 2017, Melbourne, Australia.

Soft and Cost MDD Propagators.
Guillaume Perez and Jean-Charles Régin.
Thirty-first AAAI Conference on artificial intelligence, AAAI, February. 2017, San Francisco, USA.

MDDs are Efficient Modeling Tools : An Application to some Statistical Constraints.
Guillaume Perez and Jean-Charles Régin.
International Conference on AI and OR Techniques in Constraint Programming (CPAIOR). 2017, Padova, Italia.

2016 **Enforcing Structure on Temporal Sequences : The Allen Constraint.**
P Roy, G Perez, JC Régin, A Papadopoulos, F Pachet, M Marchini.
Constraint Programming (CP), September. 2016, Toulouse, France.

Constructions and In-Place Operations for MDDs Based Constraints.
Guillaume Perez and Jean-Charles Régin.
International Conference on AI and OR Techniques in Constriant Programming for Combinatorial Optimization Problems, CPAIOR, June. 2016, Banff, Canada.

Compact-Table : Efficiently Filtering Table Constraints with Reversible Sparse Bit-Sets.
J. Demeulenaere, R. Hartert, C. Lecoutre, G. Perez, L. Perron, J-C. Régin, P. Schaus.
Constraint Programming (CP), September. 2016, Toulouse, France.

2015 **Efficient operations on MDDs for building constraint programming models.**
Guillaume Perez and Jean-Charles Régin.
International Joint Conference on Artificial Intelligence, IJCAI. 2015, Buenos aires, Argentina.

2014 **Improving GAC-4 for Table and MDD based constraints.**
Guillaume Perez and Jean-Charles Régin.
Constraint Programming (CP), Sept. 2014, Lyon, France.

Computer science projects

·***C++ - Java - Scala***	Constraint implementation in the CP solver OR-TOOLS - In the CP solver CHOCO - In the CP solver OscaR
·***Python***	Implementation of the Multi-Armed Bandit for algorithm selection on GitHub
·***C++***	LibGraph : A game engine including graphics and controls for my C++ students
·***C++***	TicTacToe : A game using LibGraph for my AI students.
·***Racket***	GeoMeter A constrained geometry software
·***Java EE***	Dynamic graphic user interface for the YOURCAST project

More

Language :	Advanced English. native French. middle Spanish
Sports :	Football - Tennis
Links :	github - DBLP - Google Scholar - My researches