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Date of birth: 01/02/1990
(27 year old)
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Guillaume Perez

Education

- 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 had the opportunity to teach C++ advanced programming, Problem solving, Web Server. I was also assistant for the teaching of R and HTML-CSS. Moreover, I taught 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. This works led to a publication into the national feature model conference. The second internship focus on constraint programming, in the development of all the available Table algorithm, in addition with a study of data structure used in compression. The third one is about the definition and implementation of a new MDD and Table propagator, which is now the State of the art for MDDs in many CP solvers - Submission and acceptance of this work to 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 Constraint 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* Constraint implementation in the CP solver [OR-TOOLS](#) - In the CP solver
- *Scala* [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](#)