# Yacine IZZA

41 allées Jules Guesde 31013 Toulouse, France +33 (0)7 77 78 29 77 ⊠ yacine.izza@gmail.com 🖻 yizza.gitlab.io



# Personal Information

Date of Birth May 31, 1991 Place of Birth Azazga, Algeria Nationality

Algerian Status Single

# Current Position

Postdoctoral Researcher, University of Toulouse, ANITI – Artificial and Natural Intelligence Toulouse Institute, France.

Visiting Researcher, Monash University, Optimization Research Group, Australia.

### Education

- 2015-2018 Doctor of Computer Science Laboratory : Center of Research in Computer Science of Lens (CRIL), France. Area of study : Artificial Intelligence, SAT, Inconsistency, Reasoning Title: "Ubiquitous computing: approaches for detecting and filtering inconsistent information in knowledge bases"<sup>1</sup> Advisors : Prof. ÉRIC GRÉGOIRE and Asst. Prof. JEAN-MARIE LANGIEZ
- 2013-2014 Master of Artificial Intelligence, Paul Sabatier University - Toulouse, France Master thesis: "Interactive Resolution and compilation of constraint satisfaction problems" Laboratory : Toulouse Institute of Computer Science Research (IRIT) Supervisor : Prof. HELENE FARGIER

#### **Professional Experiences**

- (Dec-Jan) 2020 Secondment for AniAge Project, University of Chiang, College of Art Media and Technology, Thailand.
- (Oct-Nov) 2019 Secondment for AniAge Project, University of Can Tho, College Information and Technology, Vietnam.
  - 2019-2020 Conjoint Lecturer/Researcher, University of Artois, Center of Research in Computer Science of Lens, France.
- (May-July) 2019 Secondment for AniAge Project, Universiti Teknologi Malaysia, Virtual Visualisation Vision Research Laboratory, Malaysia.
  - Conjoint Lecturer/Researcher, University of Artois, Center of Research in Computer 2018-2019 Science of Lens, France.
- 2016-2017 Teaching Assistantship, University of Artois, Center of Research in Computer Science of Lens, France.
- 2015-2016 **Teaching Assistantship**, University of Artois, Center of Research in Computer Science of Lens, France.
  - 2015 **R&D Engineer**, Center of Research in Computer Science of Lens, France.

<sup>1.</sup> https://yizza.gitlab.io/files/Thesis-Yacine-IZZA.pdf

#### Teaching Activities

 $\succ$  Algorithmic Complexity

- 30 hours of courses
- > Advanced Object Oriented Programming JAVA
  - 30 hours of practical work
- > Design Patterns JAVA
  - 30 hours of tutorials
- > Algorithmics and Programming C
  - 18 hours of practical work
- ➤ Numeration and Circuits
  - 18 hours of courses
  - 22 hours of tutorials
- > Information Theory
  - 18 hours of courses
- > Algorithmics and Programming Python
  - 24 hours of tutorials
  - 24 hours of practical work
- $\succ$  Software office 2
  - 9 hours of practical work
- $\succ$  Software office 1

• 28 hours of practical work

#### Projects

2020-2024	Member of a European project "H2020 COALA" (Complementary in the Collaboration $\label{eq:constraint}$
	between Human and AI-based Digital Assistant). https://www.coala-h2020.eu
2016-2020	Member of a Euro-Asian project "H2020 $AniAge$ " (High dimensional heterogeneous
	data based animation techniques for Southeast Asian intangible cultural heritage digital
	content). http://www.euh2020aniage.org
2014-2018	Member of a French project " $\mathbf{BR4CP}$ " (Business Recommendation for Configurable Pro-
	ducts). https://www.irit.fr/~Helene.Fargier/BR4CP/BR4CP.html
	Skills
Language	ge English : fluent   French : fluent   Arabic and Berber : native speaker
Programming	g C, C++, Java, JavaScript, Python, Perl, Shell, HTML, OWL, SQL, SPARQL
Tools/Librarie	es Git, LATEX, Microsoft Office, MiniSAT, OWL-API, PySAT, PySMT, scikit-learn, Tensor-

- Flow, XGBoost
- OS Linux, BSD Unix, Mac OS, Microsoft

#### Publications

2022 Yacine Izza, Alexey Ignatiev, Nina Narodytska, Martin C. Cooper and João Marques-Silva
« Provably Precise, Succinct and Efficient Explanations for Decision Trees » - CoRR 2022

Yacine Izza, Alexey Ignatiev and João Marques-Silva « On Tackling Explanation Redundancy in Decision Trees » - accepted at JAIR~2022

Alexey Ignatiev, Yacine Izza, Peter Stuckey and João Marques-Silva « Using MaxSAT for Efficient Explanations of Tree Ensembles » - AAAI 2022

Xuanxiang Huang, Yacine Izza, Alexey Ignatiev, Martin C. Cooper, Nicholas Asher and João Marques-Silva « Efficient Explanations for Knowledge Compilation Languages » - AAAI 2022

2021 Xuanxiang Huang, Yacine Izza, Alexey Ignatiev, Martin C. Cooper, Nicholas Asher and João Marques-Silva « Efficient Explanations for Knowledge Compilation Languages » -CoRR 2021

Xuanxiang Huang, Yacine Izza, Alexey Ignatiev and João Marques-Silva « On Efficiently Explaining Graph-Based Classifiers » - KR 2021

Yacine Izza, Alexey Ignatiev, Nina Narodytska, Martin C. Cooper and João Marques-Silva $\ll$  Efficient Explanations With Relevant Sets  $\gg$  - CoRR 2021

Yacine Izza and João Marques-Silva « On Explaining Random Forests with SAT  $\gg$  - IJCAI 2021

2020 Yacine Izza, Alexey Ignatiev and João Marques-Silva « On Explaining Decision Trees » -  $CoRR \ 2020$ 

Yacine Izza, Said Jabbour, Badran Raddaoui and Abdelhamid Boudane « On the Enumeration of Association Rules : A Decomposition-based Approach » - *IJCAI 2020* 

Sihem Belabbes, Yacine Izza, Tri-Thuc Vo, Karim Tabia and Salem Benferhat  $\ll$  An ontology-based approach for building and querying ICH video datasets  $\gg$  - *ICAART 2020* 

- 2019 Sihem Belabbes, Chi Wee Tan, Tri-Thuc Vo, Yacine Izza, Karim Tabia and Salem Benferhat « Query Answering from Traditional Dance Videos : Case Study of Zapin Dances » -ICTAI 2019
- 2018 Éric Grégoire, Yacine Izza and Du Zhang « On Admissible consensus » IJAIT (2018), volume (27) pp 1-20

Éric Grégoire, Yacine Izza and Jean-Marie Langiez - « Boosting MCSes Enumeration » - IJCAI~2018

#### Publications

- 2017 Éric Grégoire, Yacine Izza and Jean-Marie Langiez « On Computing one max<sub>⊆</sub> Consensus » in Twenty-ninth International Conference on Tools with Artificial Intelligence (ICTAI 2017)
- 2016 Éric Grégoire, Yacine Izza and Jean-Marie Langiez « On the Extraction of One Maximal Information Subset that Does not Conflict with Multiple Contexts » - in Thirty AAAI Conference on Artificial Intelligence (AAAI 2016), pp 3404–3410

# Scientific Activities

- 2022 PC member of the International Joint Conference on Artificial Intelligence (IJCAI) 2022
- 2022 PC member of the AAAI Conference on Artificial Intelligence (AAAI) 2022
- 2022 PC member of the International Journal of Computer Applications & Information Technology (IJCAIT)
- 2021 PC member of the AAAI Conference on Artificial Intelligence (AAAI) 2021
- 2021 PC member of the International Conference on Principles of Knowledge Representation and Reasoning (KR) 2021
- 2021 PC member of the International Journal on Artificial Intelligence Tools (IJAIT)
- 2021 PC member of the IEEE International Conference on Tools with Artificial Intelligence (ICTAI) 2021

#### Administrative Activities

- 2020-2022 Management of the resources of the supercomputer CALMIP for DeepLever ANITI Chair.
  - 2018 Member of organizing committee of "International Conference on Principles and Practice of Constraint Programming" (CP'18)
  - 2017 Member of organizing committee of "International Conference on Industrial, Engineering, Other Applications of Applied Intelligent Systems" (IEA/AIE'17)
  - 2017 Member of organizing committee of a workshop "Journées Francophones de Programmation par Contraintes" (JFPC'17)
  - 2015 Member of organizing committee of a summer school "Advanced Course on Artificial Intelligence" (ACAI'15)
    References
- Professor Joao Marques-Silva IRIT CNRS, France ⊠ joao.marques-silva@irit.fr
- Assoc. Prof. Alexey Ignatiev Monash University, Australia 🛛 🖂 alexey.ignatiev@monash.edu
- Professor Peter J. Stuckey Monash University, Australia  $\square$  peter.stuckey@monash.edu
- $\bullet\,$  Dr. Nina Narodytska VMW<br/>are Research, United States  $\quad \boxtimes \ {\rm nnarodytska}@vmware.com$
- Prof. Eric Gregoire CRIL Artois University, France  $\square$  gregoire@cril.fr