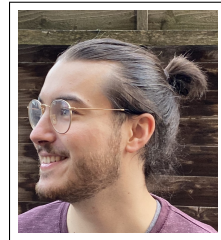# Clément Tamines
PhD Student in Computer Science

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I am a PhD student in the Computer Science department at the University of Mons (UMONS) in Belgium. I am co-supervised by Véronique Bruyère (UMONS) and Jean-François Raskin (Université libre de Bruxelles). My research interests regard equilibria in non-zero-sum multiplayer games and solving parity and generalized parity games. I am also very interested in the field of machine learning.

Education

10/2018 – 09/2022	**PhD in Science**, *Computer Science*, University of Mons, Belgium.
10/2019 – 03/2020	**University Certificate**, *Artificial Intelligence*, University of Mons, Belgium. Graduated *Magna Cum Laude*.
09/2016 – 08/2018	**Master of Science**, *Computer Science*, University of Mons, Belgium. Graduated *Summa Cum Laude*.
09/2013 – 08/2016	**Bachelor of Science**, *Computer Science*, University of Mons, Belgium. Graduated *Cum Laude*.

Academic Experience

10/2018 – 09/2022	**PhD Thesis**, *University of Mons*.
Title	Equilibria in Multiplayer Games with Multiple Objectives.
Directors	Véronique Bruyère (UMONS) and Jean-François Raskin (ULB).
10/2018 – 01/2022	**Teaching Assistant**, *University of Mons*.
	○ Algorithmics and Bioinformatics: Java 8 project on DNA fragment assembly.
09/2018 – 08/2019	**Supervisor**, *University of Mons*.
	○ Research internship on symbolic solving of games using Binary Decision Diagrams.
	○ Master student project on window techniques for solving parity games.
09/2016 – 05/2018	**Student Teaching Assistant**, *University of Mons*.
	○ Programming and algorithmics I (Python 3).
	○ Programming and algorithmics II (Java 8).

Professional Experience

09/2017 – 11/2017	**Internship in Software Development**, *Thales Belgium SA*. Tubize, Belgium. Design and implementation of a constraint programming model handling the network generation part of a radio configuration tool. The implementation was done using Java 8 and the Choco Solver constraint programming library.

Publications

[BPRT19a]   Véronique Bruyère, Guillermo A. Pérez, Jean-François Raskin, and Clément Tamines. **Partial Solvers for Generalized Parity Games**. In *Reachability Problems - 13th International Conference, RP 2019, Brussels, Belgium, September 11-13, 2019, Proceedings*, pages 63–78, 2019.

[BPRT19b]   Véronique Bruyère, Guillermo A. Pérez, Jean-François Raskin, and Clément Tamines. **Partial Solvers for Generalized Parity Games (Full Version)**. *CoRR*, abs/1907.06913, 2019.

[BRT21]   Véronique Bruyère, Jean-François Raskin, and Clément Tamines. **Stackelberg-Pareto Synthesis (Full Version)**. *CoRR*, abs/2102.08925, 2021.

Programming Skills

Python	Tensorflow (Keras), Scikit-learn, PyTest, Jupyter Notebook, Matplotlib
Cloud service	Google Colaboratory, FloydHub
Java 8	Swing, JUnit, Choco Solver
Tools	Git, Maven, JetBrains suite, Eclipse

Languages

French	Native language.
English	Full professional proficiency.
Dutch	Notions (looking to improve).

Talks

2021	**Stackelberg-Pareto Synthesis**, MFV Seminar, 24/03, Brussels, Belgium.
2020	**Formal Verification Using Games**, Youth Seminar, 05/03, Mons, Belgium.
2019	**Partial Solvers for Generalized Parity Games**, Highlights'19, 18/09, Warsaw, Poland.
	Partial Solvers for Generalized Parity Games, RP'19, 11/09, Brussels, Belgium.
	Partial Solvers for Generalized Parity Games, MoRe'19, 22/06, Vancouver, Canada.
	Your Turn to Play!, Math & Science Days'19, 29/03, Mons, Belgium.

Attended Research Events

2021	**Reinforcement Learning: from Theory to Practice**, summer school, online.
	Theoretical Foundations of Computer Systems Boot Camp, online.
2020	**GandALF: Games, Automata, Logics, and Formal Verification**, online.
	Highlights of Logic, Games and Automata, online.
	Modelling and Verification of Parallel Processes, MOVEP summer school, online.
	Dynamics and Information Workshop, Tel Aviv, Israel.
2019	**Highlights of Logic, Games and Automata**, Warsaw, Poland.
	13th International Conference on Reachability Problems, Brussels, Belgium.
	LearnAut: Learning and Automata (LICS'19 workshop), Vancouver, Canada.
	MoRe: Multi-objective Reasoning in Verification and Synthesis , Vancouver, Canada.
	Theory and Algorithms in Graph and Stochastic Games, co-organizer, Mons, Belgium.
	MdC: Mardi des Chercheurs (UMONS research event), Mons, Belgium.
	CFV Seminar, Brussels, Belgium.
	MFV Seminar, Brussels, Belgium.
2018	**Highlights of Logic, Games and Automata**, Berlin, Germany.
	Logic and learning, FoPSS summer school, Oxford, UK.
	Modelling and Verification of Parallel Processes, MOVEP summer school, Cachan, France.

Miscellaneous

2015 – 2018	**Activities and Societies**, *University of Mons*.
	○ Communication manager of the General Association of Science Students.
	○ Member of the Computer Science Society.
	○ Student member in the council of the Faculty of Science.
2015 – 2018	**Student Jobs**, *University of Mons*.
	○ Guiding and informing people through campus during open days.

- Informing people during student fairs (SIEP).