Tony Ribeiro

Curriculum Vitae

Post-doc

Education

2015	**Ph.D**.
	SOKENDAI, The Graduate University for Advanced Studies, Tokyo, Japan
2012	**Master Informatics**.
	Université d'Angers, France
2010	**Bachelor Informatics**.
	Université d'Angers, France
2007	**Baccalaureate**.
	Lycée Duplessis Mornays, Saumur, France

Ph.D. Thesis

Title	*Studies on Learning Dynamics of Systems from State Transitions.*
Supervisor	Katsumi Inoue
Co-advisors	Tetsunari Inamura & Helmut Prendinger & Seiji Yamada
Jury	Katsumi Inoue (Professor, National Institute of Informatics, Tokyo)
	Tetsunari Inamura (Associate Professor, National Institute of Informatics, Tokyo)
	Helmut Prendinger (Professor, National Institute of Informatics, Tokyo)
	Seiji Yamada (Professor, National Institute of Informatics, Tokyo)
	Morgan Magnin (Associate Professor, IRCCyN, École Centrale de Nantes)
	Taisuke Sato (Professor, Tokyo Institute of Technology)
Defense	July 14th 2015

Master Thesis

Title	*Multi-Agent Systems and Answer Set Programming: Reasoning in Dynamic Environnement*
Supervisors	Stéphane Loiseau (Professor, Université d'Angers)
	Katsumi Inoue (Professor, National Institute of Informatics, Tokyo)
Defense	June 2012

Distinctions

Oct. 2021 ◇ **Best paper award, ILP 2020-21, Virtual**.
Jun. 2019 ◇ **Kaggle competitions expert, France**.
Sep. 2013 ◇ **Best Student Award, National Institute of Informatics, Japan**.
May 2013 ◇ **The 3rd Prize of Best Challenges and Visions Papers at AAMAS 2013, USA**.
2013-2015 **NII Scholarship National Institute of Informatics, Japan**.
2010-2012 **Master Merit Scholarship, France**.

Positions (since graduation)

Jan. 2021 **Postdoc**, Laboratoire des Sciences du Numérique de Nantes (LS2N-UMR CNRS
Dec. 2021 6004), France.
1 year ◇ Funding : RFI Atlanstic, Challenge Postdoc International 2020

Jun. 2019 **Independant Researcher**, freelance, France.
Dec 2020 Consultant for SONAR CO., LTD., Tokyo, Japan. AI/Datasciences project supervisor for master students
1.5 years ◇ of Ecole Centrale de Nantes, France.

Sept. 2018 **Benevol Researcher**, Laboratoire des Sciences du Numérique de Nantes (LS2N-UMR
May 2019 CNRS 6004), France.
9 months ◇ Funding: self-funded.

Jun 2018 **Postdoc**, Laboratoire des Sciences du Numérique de Nantes (LS2N-UMR CNRS
Aug. 2018 6004), France.
3 months ◇ Funding : project ANR Hyclock

Oct. 2015 **Postdoc**, Laboratoire des Sciences du Numérique de Nantes (LS2N-UMR CNRS
Dec. 2017 6004), France.
2.3 years ◇ Funding: École Centrale de Nantes, project ANR Hyclock

Invitations (since graduation)

Mar. 2017 **Invited Researcher**, Inoue Lab, National Institute of Informatics (NII), Tokyo, Japan.
Aug. 2020 Funding: MOU NII/RFI Atlanstic and Kakenhi Kiban-A.
total: 1 year ◇ Invitations: march 2017, june 2017, february-march 2018, june-august 2018, march-august 2020.

Internships

Feb-Aug 2012 **Master 2 internship**, Inoue Lab, National Institute of Informatics, Tokyo.
6 month ◇ *Subject:* Modular Reasoning in Multi-Agent Systems Using Meta-Knowledge and Answer Set Programming.

Mar-May 2011 **Master 1 internship**, LERIA, Université d'Angers, France.
3 month ◇ *Subject:* QBF validity search: exploitation of the propositional formula insatisfiability.

Apr-May 2010 **Bachelor 3 internship**, LERIA, Université d'Angers, France.
2 month ◇ *Subject:* Development of an OpenGL 3D engine for wargame.

Personnal skills

Programming Python, C, C++, C#, Java, Prolog, ASP, XHTML, CSS, Javascript, PHP, SQL, Bash, ASM x86.
Softwares Linux, Microsoft Windows, Android 4.0+, iOS 8.0+, Atom, Git, Gimp, Blender, Unity3D, LibreOffice.
Others Linux Command Line, Latex (articles, slides, posters), 3D modelisation, video encoding.
Languages French (mother tongue), English (professional), Japanese (basic).

Research interests

- Artificial Intelligence
- Logic Programming
- Machine Learning
- Dynamic Systems

Publications

International Journal with peer-reviews

[1] **Tony Ribeiro**, Maxime Folschette, Morgan Magnin, Katsumi Inoue.
Learning any memory-less discrete semantics for dynamical systems represented by logic programs.,
in *Machine learning Journal*, to appear (2021).

[2] Alfonso Ortega, Julian Fierrez1, Aythami Morales, Zilong Wang, Marina de la Cruz, Cesar L. Alonso, **Tony Ribeiro**.
Symbolic AI for XAI: Evaluating LFIT Inductive Programmingfor Explaining Biases in Machine Learning.,
in *MDPI Computers*, to appear (2021).

[3] Yin Jun Phua, **Tony Ribeiro**, Katsumi Inoue.
Learning Representation of Relational Dynamics with Delays and Refining with Prior Knowledge.,
in IfCoLog Journal of Logics and their Applications 6(4), pages 695-708 (2019).

[4] Chiaki Sakama, Katsumi Inoue, **Tony Ribeiro**.
Learning Inference Rules from Data,
in KI-Künstliche Intelligenz 33 (3), pages 267-278, 2019.

[5] David Martínez, Guillem Alenya, **Tony Ribeiro**, Katsumi Inoue, Carme Torras.
Relational Reinforcement Learning for Planning with Exogenous Effects,
in *Journal of Machine Learning Research*, 18(78):1-44, august 2017.

[6] Emna Ben Abdallah, **Tony Ribeiro**, Morgan Magnin, Olivier Roux, Katsumi Inoue.
Modeling Delayed Dynamics in Biological Regulatory Networks from Time Series Data,
in *Algorithms*, volume 10, issue 1, january 2017.

[7] **Tony Ribeiro**, Morgan Magnin, Katsumi Inoue, Chiaki Sakama.
Learning delayed influences of biological systems,
in *Frontiers in Bioengineering and Biotechnology, 2(81)*, pages 9, january 2015.

[8] Katsumi Inoue, **Tony Ribeiro**, Chiaki Sakama.
Learning from Interpretation Transition,
in *Machine learning Journal*, 94(1), pages 51-79, january 2014.

Book Chapter

[9] **Tony Ribeiro**, Maxime Folschette, Laurent Trilling, Nicolas Glade, Katsumi Inoue, Morgan Magnin, Olivier Roux.
Les enjeux de l'inférence de modèles dynamiques des systèmes biologiques à partir de séries temporelles,
to appear in *ISTE Sciences*, 2020.

[10] Alexandre Rocca, Nicolas Mobilia, Eric Fancon, **Tony Ribeiro**, Laurent Trilling, Katsumi Inoue.
Asp for construction and validation of regulatory biological networks,
in *Logical Modeling of Biological Systems*, pages 167-206, 2014.

International Conferences with peer-reviews

[11] **Tony Ribeiro**, Maxime Folschette, Morgan Magnin, Olivier Roux, Katsumi Inoue.
Learning Dynamics with Synchronous, Asynchronous and General Semantics,
in The 28th International Conference on Inductive Logic Programming, ILP 2018, Ferrara, Italy.

[12] Yin Jun Phua, **Tony Ribeiro**, Sophie Tourret, Katsumi Inoue.
Learning Logic Program Representation for Delayed Systems with Limited Training Data,
in The 27th International Conference on Inductive Logic Programming, ILP 2017, Orléans, France.

[13] **Tony Ribeiro**, Sophie Tourret, Maxime Folschette, Morgan Magnin, Domenico Borzacchiello, Francisco Chinesta, Olivier Roux, Katsumi Inoue.
Inductive Learning from State Transitions over Continuous Domains,
in The 27th International Conference on Inductive Logic Programming, ILP 2017, Orléans, France.

[14] Emna Ben Abdallah, **Tony Ribeiro**, Morgan Magnin, Olivier Roux and Katsumi Inoue.
Inference of delayed biological regulatory networks from time series data,
in 14th International Conference on Computational Methods in Systems Biology, CMSB 2016, Cambridge, United Kingdom. September 2016.

[15] Tenda Okimoto, **Tony Ribeiro**, Damien Bouchabou, Katsumi Inoue.
Mission Oriented Robust Multi-Team Formation and its Application to Robot Rescue Simulation,
proceedings of the 25th International Joint Conference on Artificial Intelligence, (IJCAI-16), New York, NY, USA.

[16] David Martinez, Guillem Alenya, Carme Torras, **Tony Ribeiro**, Katsumi Inoue.
Learning Relational Dynamics of Stochastic Domains for Planning,
proceedings of the 26th International Conference on Automated Planning and Scheduling, (ICAPS 2016), London, United Kingdom.

[17] **Tony Ribeiro**, Morgan Magnin, Katsumi Inoue, Chiaki Sakama.
Learning Multi-Valued Biological Models with Delayed Influence from Time-Series Observations,
proceedings of the 14th International Conference on Machine Learning and Applications, (ICMLA 2015), pages 25-31, Miami, Florida, USA.

[18] David Martinez, *Tony Ribeiro*, Katsumi Inoue, Guillem Alenya, Carme Torras.
Learning probabilistic action models from interpretation transitions,
to appear in *The 31st International Conference on Logic Programming (ICLP 2015), pages 12*, Cork, Ireland.

[19] Chiaki Sakama, *Tony Ribeiro*, Katsumi Inoue.
Learning Deduction Rules by Induction,
to appear in *The 25th International Conference on Inductive Logic Programming (ILP 2015), pages 6*, Kyoto, Japan.

[20] **Tony Ribeiro**, Morgan Magnin, Katsumi Inoue, Chiaki Sakama.
Learning Multi-Valued Biological Models with Delayed Influence from Time-Series Observations,
to appear in *The 25th International Conference on Inductive Logic Programming (ILP 2015), pages 6*, Kyoto, Japan.

[21] Tenda Okimoto, Nicolas Schwind, Maxime Clément, **Tony Ribeiro**, Katsumi Inoue, Pierre Marquis.
How to Form a Task-Oriented Robust Team,
to appear in *the 14th International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2015)*, Istanbul, Turkey.

[22] **Tony Ribeiro**, Morgan Magnin, Katsumi Inoue.
Learning delayed influence of dynamical systems from interpretation transition,
in *proceedings of the 24th International Conference on Inductive Logic Programming (ILP 2014), pages 6*, Nancy, France.

[23] **Tony Ribeiro**, Katsumi Inoue.
Learning prime implicant conditions from interpretation transition,
in *proceedings of the 24th International Conference on Inductive Logic Programming (ILP 2014), pages 12*, Nancy, France.

[24] **Tenda Okimoto**, **Tony Ribeiro**, Maxime Clément, Katsumi Inoue.
Modeling and algorithm for dynamic multi-objective weighted constraint satisfaction problem,
in *proceedings of the 6th International Conference on Agents and Artificial Intelligence (ICAART 2014)*, pages 420-427, Angers, France.

[25] **Maxime Clément**, Tenda Okimoto, **Tony Ribeiro**, Katsumi Inoue.
Modeling and Algorithm for Dynamic Multi-Objective Distributed Optimization,
in *proceedings of Principles and Practice of Multi-Agent Systems (PRIMA 2013)*, pages 413-420, Springer, 2013, Dunedin, New Zealand.

[26] **Tony Ribeiro**, Katsumi Inoue, Chiaki Sakama.
A bdd-based algorithm for learning from interpretation transition,
in *proceedings of the 23th International Conference on Inductive Logic Programming (ILP 2013)*, pages 47-63, Springer, 2014.

[27] **Tony Ribeiro**, Katsumi Inoue, Gauvain Bourgne.
Combining answer set programs for adaptive and reactive reasoning,
in *proceedings of the 29th International Conference on Logic Programming (ICLP 2013)*, TPLP, 13(4-5-Online-Supplement), pages 10, 2013.

[28] Nicolas Schwind, Tenda Okimoto, Katsumi Inoue, Hei Chan, **Tony Ribeiro**, Kazuhiro Minami, Hiroshi Maruyama.
Systems resilience: a challenge problem for dynamic constraint-based agent systems,
in *proceedings of the international conference on Autonomous agents and multi-agent systems (AAMAS 2013)*, pages 785-788, 2013.

Workshops avec comité de lecture

[29] Alfonso Ortega, Julian Fiérrez, Aythami Morales, Zilong Wang,**Tony Ribeiro**.
Symbolic AI for XAI: Evaluating LFIT Inductive Programming for Fair and Explainable Automatic Recruitment,
in IEEE Winter Conference on Applications of Computer Vision Workshops, (WACV Workshops 2021), Waikola, HI, USA, January 2021.

[30] Xinwei Chai, **Tony Ribeiro**, Morgan Magnin, Olivier Roux, Katsumi Inoue.
Static Analysis and Stochastic Search for Reachability Problem,
in The Ninth International Workshop on Static Analysis in Systems Biology 2018, (SASB 2018), Freiburg, Germany, 2018.

[31] Yin Jun Phua, **Tony Ribeiro**, Katsumi Inoue.
Learning Representation of Relational Dynamics with Delays and Refining with Prior Knowledge,
in Thirteenth International Workshop on Neural-Symbolic Learning and Reasoning, (NeSy 2018), Prague, Czech Republic, 2018.

[32] Damien Bouchabou, **Tony Ribeiro**, Tenda Okimoto, Katsumi Inoue.
Robust multi-team formation and its application to robot rescue simulation,
in *the proceeding of the Joint Agent Workshop and Symposium, pages 4*, Miyazaki, Japan, 2014.

[33] Maxime Clément, Tenda Okimoto, **Tony Ribeiro**, Katsumi Inoue.
Model and Algorithm for Dynamic Multi-Objective Distributed Optimization,
in *the International Joint Workshop on Optimisation in Multi-Agent Systems and Distributed Constraint Reasoning (OptMAS-DCR 2014)*, Paris, France, 2014.

[34] Nicolas Schwind, Tenda Okimoto, **Tony Ribeiro**, Sébastien Konieczny, Katsumi Inoue.
Discriminative mo-cop operators,
in *proceeding of The International Joint Workshop On Optimisation In Multi-Agent Systems And Distributed Constraint Reasoning (OPTMAS-DCR)*, in conjunction with AAMAS 2014, Paris, France, 2014.

[35] Alexandre Rocca, **Tony Ribeiro**, Katsumi Inoue.
Inference and Learning of Boolean Networks Using Answer Set Programming,
in *the First International Workshop on Learning and Nonmonotonic Reasoning (LNMR 2013)*, Corunna, Spain.

[36] Tenda Okimoto, Naoto Ikegai, **Tony Ribeiro**, Katsumi Inoue, Hitoshi Okada, Hiroshi Maruyama.
Cyber Security Problem based on Multi-Objective Distributed Constraint Optimization Technique,
in *The 1st Workshop on Systems Resilience (WSR 2013) (held in conjunction with DSN 2013)*, Budapest, Hungary.

[37] **Tony Ribeiro**, Katsumi Inoue, Gauvain Bourgne.
Modular Reasoning in Multi-Agent Systems Using Meta-Knowledge and Answer Set Programming,
in *International Joint Agent Workshop and Symposium (IJAWS) 2012*, Kakegawa, Japan.