Gauthier PICARD

PhD, Hab. in Computer Science

SENIOR RESEARCH SCIENTIST IN APPLIED ARTIFICIAL INTELLIGENCE

WORK EXPERIENCE & POSITIONS

gauthier.picard@onera.fr

from 2020

from 2018

2018-2020

ONERA DTIS-SYD

@ http://gauthier-picard.info/

2 Avenue Edouard Belin, 31055 Toulouse, France

Senior Research Scientist (Directeur de recherche) at Intelligent Systems and Decision Unit
(SYD), Information processing and systems Department (DTIS) of ONERA (Office national
d'études et de recherches aérospatiales), Toulouse, France
Full Professor (in long-term leave of absence) at Computer Science and Intelligent Systems
Department, Henri Fayol Institute of the École Nationale Supérieure des Mines de Saint-Etienne
(EMSE), France
Visiting Researcher at IRIT (Institute of Research in Computer Science of Toulouse), France

2015-2020 Researcher in the Multi-Agent and Services project, of the Connected Intelligence team, Laboratoire Hubert Curien UMR CNRS 5516, France
 2007-2018 Associate Professor (Maître-Assistant des Ecoles des Mines) at Computer Science and Intelligence team, Laboratorie Hubert Curien UMR CNRS 5516, France

2007-2018 Associate Professor (*Maître-Assistant des Ecoles des Mines*) at Computer Science and Intelligent Systems Department, Henri Fayol Institute of the École Nationale Supérieure des Mines de Saint-Etienne (EMSE), France

2006-2007 Research and european relations engineer at IRIT (Institute of Research in Computer Science of Toulouse), France

2004-2006 Attaché temporaire d'enseignement et recherche (equivalent to assistant lecturer) at the University Paul Sabatier of Toulouse, France

2001-2004 Moniteur et Allocataire de Recherche (**PhD student** national funding due to merit) at the University Paul Sabatier of Toulouse, France

EDUCATION

2014	Habilitation à diriger les recherches (HDR) in Computer Science (UJM, France)
	 Adaptive multiagent systems: engineering and problem solving
2004	PhD in Computer Science (IRIT, Toulouse III, France) — Multiagent-oriented methodology
2001	DEA in Artificial Intelligence (equivalent to MSc) (IRIT, Toulouse III, France) — with honours (Ranking: 2 nd), obtain PhD thesis funding on merit — Master thesis on collective robotics
2000	Maîtrise et Licence in Computer Science (equivalent to BSc)(Toulouse III, France)— with honours (first 5%), obtain Master thesis funding on merit
1998 1995	DEUG in Mathematics and Computer Science (2-year university degree) (Pau, France) Baccalauréat in Maths & Physics (secondary school diploma) (Clermont-Fd, France)

RESEARCH THEMES

- Artificial intelligence
- Multi-agents systems, adaptive multi-agent systems
- Distributed optimization
- Resource allocation and coordination
- Self-organisation, as a mechanism to design artificial systems
- Application to collective robotics, space systems, UAVs

PROFESSIONAL ACTIVITIES & SERVICES

Publications

http://gauthier-picard.info/#publications

Chair

Program Chair (OptLearnMAS'21, JFSMA'18, SASO'16, AIPower'16, ESAW'09, ESAW'08), Tutorial Chair (PFIA'19), Workshop Chair (SASO'15), Doctoral Consortium Chair (SASO'14), Steering Committee (ESAW), Session Chair (IICAI'07, ROADEF'11), Demo Chair (WI-IAT'11), Organisation Chair (SASO'12)

PC member

OptLearnMAS'23, PAAMS'23, IJCAI'23, ECAI'23, JFSMA'23, AAMAS'23, AAMAS'23 Blue Sky Ideas, DARS'22, OptLearnMAS'22, ACSOS'22, EPIA'22, PAAMS'22, EXTRAAMAS'22, IJCAI-ECAI'22, The WebConf'22, AAMAS'22, AAAI'22, ACSOS'21, PAAMS'21, EXTRAAMAS'21, OptLearnMAS'21, AAMAS'21, IJCAI'21, AAAI'21, The WebConf'20, AAMAS'20, AAAI'20, ECAI'20, ICSOS'20, IJCAI'20, EPIA'19, PAAMS'19, EXTRAAMAS'19, CP'19, SASO'19, OPTMAS'19, JFSMA'19, AAMAS'19, AAAI'19, ICAART'19, IJCAI'19, AAMAS'18, AAAI'18, ICAART'18, WWW'18 Demo Track, SmartIoT@AAAI'18, AISGSB@AAAI'18, IJCAI-ECAI'18, ICCS'18, CP'18, OPTMAS'18, IJCAI'17, OPTMAS'17, SASO'17, JFSMA'17, PRIMA'17, SASO'ST'17, MAS&'16, IBERAMIA'16, OPTMAS'16, AAMAS'15, ISMIS'15, JFSMA'15, MAS&S'15, SASO'15, AHPC'14, AMSTA'14, AAMAS'14, MAS&S'14, ICRA'13, IJCAI'13, JFSMA'13, JFSMA'12, SASO'12, AOSE'12, MAS&S'12, PAAMS'12, AOSE'11, BADS'11, IDETC'11, IICAI'11, SASO'11, AAMAS'10, BADS'10, AOSE'10, SASO'10, WIVE'10, BADS'09, SARC'09, IICAI'09, IAMA'09, SASO'09 (posters), SARC'08, IICAI'07, RJCIA'07, EUMAS'05, ESAW'04, EUMAS'04

Reviewer

Journal of Artificial Intelligence Research (JAIR), Annals of Mathematics and Artificial Intelligence (AMAI), Computational Intelligence (COIN), Autonomous Agents and Multi-Agent Systems Journal (JAAMAS), Journal of Control, Future Generation Computer Systems Journal (FGCS), International Journal of Agent-Oriented Software Engineering (IJAOSE), ACM Transactions on Autonomous and Adaptive Systems (TAAS), Revue d'Intelligence Artificielle (RIA), Simulation Modelling Practice and Theory Journal (SIMPAT), Web Intelligence An International Journal (WIC), International Journal of Production Research (IJPR), COIN@AAMAS'08, AAMAS'05, AAMAS'08, COIN@AAMAS'08, AOMP'08, APSLA'08, SBIA'08, RFIA'08, AOSE'09, ISA'09, ICRA'10, WI-IAT'11, AAAI'12

Organization

JFSMA'15, SASO'12, WI-IAT'11, EASSS'10, MALLOW'10, WI'09 Web Intelligence Summer School, ESAW'09, ESAW'08, JFSMA'07, ESAW'04

MAIN PUBLICATIONS

- Picard, Gauthier (2023). "Multi-Agent Consensus-based Bundle Allocation for Multi-Mode Composite Tasks". In: International Conference on Autonomous Agents and Multiagent Systems (AAMAS-23). IFAAMAS, pp. 504–512. DOI: 10.5555/3545946.3598677. URL: https://dl.acm.org/doi/10.5555/3545946.3598677. [AR=23%] [Core A* Pre-proceedings 1 review phase]
- (2022a). "Auction-based and Distributed Optimization Approaches for Scheduling Observations in Satellite Constellations with Exclusive Orbit Portions". In: *International Conference on Autonomous Agents and Multiagent Systems (AAMAS-22)*. IFAAMAS, pp. 1056–1064. DOI: https://dl.acm.org/doi/10.5555/3535850.3535968. [AR=26%] [Core A* Pre-proceedings 1 review phase]
- (2022b). "Trajectory Coordination based on Distributed Constraint Optimization Techniques in Unmanned Air Traffic Management". In: *International Conference on Autonomous Agents and Multiagent Systems (AAMAS-22)*. IFAAMAS, pp. 1065–1073. DOI: https://dl.acm.org/doi/10.5555/3535850.3535969. [AR=26%] [Core A* Pre-proceedings 1 review phase]
- Rust, Pierre, Picard, Gauthier, and Ramparany, Fano (2022). "Resilient Distributed Constraint Reasoning to Autonomously Configure and Adapt IoT Environments". In: *ACM Transactions on Internet Technology* 22.4, pp. 1–31. DOI: http://dx.doi.org/10.1145/3507907. [Q1, IF=4.67]
- Pham Tran Anh, Quang, Singh, Kamal, Bradai, Abbas, Picard, Gauthier, and Riggio, Roberto (2019). "Adaptive Allocation Algorithms for Service Function Chains: Single and Multi-domain orchestration". In: *IEEE Transactions on Network and Service Management* 16.1, pp. 98–112. doi: 10.1109/TNSM.2018.2876623. URL: https://ieeexplore.ieee.org/document/8494813. [Q1, IF=3.286]