Gauthier PICARD

PhD, Hab. in Computer Science

SENIOR RESEARCH SCIENTIST IN APPLIED ARTIFICIAL INTELLIGENCE

WORK EXPERIENCE & POSITIONS

gauthier.picard@onera.fr

2004-2006

2001-2004

ONERA DTIS-SYD

(Pau, France)

(Clermont-Fd, France)

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2 Avenue Edouard Belin, 31055 Toulouse, France

from 2020	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		
from 2018	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		
2018-2020	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, Labo-		
	ratoire 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		

	EDUCATION	
2014	Habilitation à diriger les recherches (HDR) in Computer Science — Adaptive multiagent systems: engineering and problem solve	
2004	PhD in Computer Science — Multiagent-oriented methodology	(IRIT, Toulouse III, France)
2001	 DEA in Artificial Intelligence (equivalent to MSc) — with honours (Ranking: 2nd), obtain PhD thesis funding on a — Master thesis on collective robotics 	(IRIT, Toulouse III, France) merit
2000	Maîtrise et Licence in Computer Science (equivalent to BSc) — with honours (first 5%), obtain Master thesis funding on men	(Toulouse III, France)

Attaché temporaire d'enseignement et recherche (equivalent to assistant lecturer) at the Univer-

Moniteur et Allocataire de Recherche (PhD student national funding due to merit) at the Uni-

RESEARCH THEMES

DEUG in Mathematics and Computer Science (2-year university degree)

1995 | Baccalauréat in Maths & Physics (secondary school diploma)

— Artificial intelligence

1998

- Multi-agents systems, adaptive multi-agent systems
- Distributed optimization
- Resource allocation and coordination
- Self-organisation, as a mechanism to design artificial systems

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— Application to collective robotics, space systems, UAVs

PROFESSIONAL ACTIVITIES & SERVICES

Publications

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

Supervision

7 supervised and defended PhDs, 3 supervised Postdocs, 8 supervised and defended Master students

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, EXTRAA-MAS'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, EXTRAA-MAS'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, AA-MAS'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]