Gauthier PICARD

PhD, Hab. in Computer Science

SENIOR RESEARCH SCIENTIST IN APPLIED ARTIFICIAL INTELLIGENCE

gauthier.picard@onera.fr

@ http://gauthier-picard.info/

DTIS, ONERA, Université de Toulouse 2 Avenue Edouard Belin, 31055 Toulouse, France

Work Experience & Positions		
from 2020	Senior Research Scientist (Directeur de recherche) at EDO Research Team, Information pro-	
	cessing 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, Lab-	
	oratoire Hubert Curien UMR CNRS 5516, France	
2007-2018	Associate Professor (Maître-Assistant des Ecoles des Mines) at Computer Science and Intelli-	
	gent 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 Sci-	
	ence of Toulouse), France	
2004-2006	Attaché temporaire d'enseignement et recherche (equivalent to assistant lecturer) at the Uni-	
	versity Paul Sabatier of Toulouse, France	
2001-2004	Moniteur et Allocataire de Recherche (PhD student national funding due to merit) at the Uni-	
	versity Paul Sabatier of Toulouse, France	

	EDUCATION
2014	Habilitation à diriger les recherches (HDR) in Computer Science — Adaptive multiagent systems: engineering and problem solving (UJM, France)
2004	PhD in Computer Science — Multiagent-oriented methodology (IRIT, Toulouse III, France)
2001	 DEA in Artificial Intelligence (equivalent to MSc) (IRIT, Toulouse III, France) with honours (Ranking: 2nd), obtain PhD thesis funding on merit Master thesis on collective robotics
2000	 Maîtrise and Licence in Computer Science (equivalent to BSc) — 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 (MASSpace'24, 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

AAMAS'24, ECAI'24, IJCAI'24, JFSMA'24, OptLearnMAS'24, PAAMS'24, 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]