Gauthier PICARD

PhD, Hab. in Computer Science

SENIOR RESEARCH SCIENTIST IN APPLIED ARTIFICIAL INTELLIGENCE

gauthier.picard@onera.fr

ONERA DTIS-SYD

@ http://gauthier-picard.info/

2 Avenue Edouard Belin, 31055 Toulouse, France

WORK EXPERIENCE & POSITIONS

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			
	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		
2004-2006	Attaché temporaire d'enseignement et recherche (equivalent to assistant lecturer) at the Univer-		
	sity 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	e (UJM, France)
	 Adaptive multiagent systems: engineering and problem solv 	ing
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 me	rit
1998	DEUG in Mathematics and Computer Science (2-year university	degree) (Pau, France)
1995	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

Supervision

7 supervised and defended PhDs (no ongoing supervision)

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, 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)*. in press. IFAA-MAS. [AR=26%] [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]