**Gauthier PICARD** **PhD, Hab. in Computer Science**

Senior Research Scientist in Applied Artificial Intelligence

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## Work Experience & Positions

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| ***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, Laboratoire 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

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

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| ***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, IJCAI'24, JFSMA'24, OptLearnMAS'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, SASOˆST'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]