Curriculum Vitæ

Gauthier PICARD

Senior Research Scientist, PhD, Hab.

Applied Artificial Intelligence and Distributed Optimization

Information processing and systems Department (DTIS)
Intelligent Systems and Decision Unit (SYD)
ONERA, The French Aerospace Lab
2 Avenue Edouard Belin, 31000 Toulouse
gauthier.picard@onera.fr

[Updated on March 22, 2021]

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: 2nd), 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	**DEUG in Mathematics and Computer Science** (2-year university degree) (Pau, France)
1995	**Baccalauréat in Maths & Physics** (secondary school diploma) (Clermont-Fd, France)

Work Experience & Positions

from 2020	**Senior Research Scientist** 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) at Computer Science and Intelligent Systems Department, Henri Fayol Institute of the École Nationale Supérieure des Mines de Saint-Etienne (ENSM.SE), 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 — *Research topics*: Artificial intelligence, Multi-agent systems, self-organization, constraint satisfaction and optimization, smart grids, intelligent transport systems — *Research projects*: ANR ETHICAA, ITEA2 SEAS
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 (ENSM.SE), France — *Educational topics*: Object-oriented programming with Java, Object-oriented Analysis and Design with UML, Artificial Intelligence, Logics — *Research topics*: Artificial intelligence, multi-agent systems, self-organization, constraint satisfaction and optimization, robotics, smart grids, intelligent transport systems — *Research projects*: ANR ETHICAA, ITEA2 SEAS, ANR ID4CS, CMIRA-RRA MAOP, ISLE-RRA WI — *Supervision*: 5 PhD students, 5 master students, 1 Postdoc student

2006-2007	**Research and european relations engineer** at IRIT (Institute of Research in Computer Science of Toulouse), France — *Responsabilities*: european projects arrangement & management, european relations — *Research topics*: Multi-agent systems, self-organization, constraint satisfaction and optimization, robotics
2004-2006	Attaché temporaire d'enseignement et recherche (equivalent to **assistant lecturer**) at the University Paul Sabatier of Toulouse, France — *Educational topics*: Multi-agent systems, parallelism (C, JAVA), operating systems (UNIX, Linux and Windows), software engineering (Rational Rose, Eclipse), imperative and functional programming (CAML), artificial intelligence (CAML) — *Research topics*: Multi-agent systems, self-organization, constraint satisfaction and optimization, robotics — Partnership with ONERA (G. Verfaillie) – co-supervision of MS Student on frequency assignment — *Research projects*: RNTL ADELFE — *Supervision*: 1 master student
2001-2004	Moniteur et Allocataire de Recherche (**PhD student** national funding due to merit) at the University Paul Sabatier of Toulouse, France — *Educational topics*: same as above — *Research topics*: Multi-agent systems, self-organization, agent-oriented software engineering — *Developments* and modelling: distributed time tabling solver (french national project ADELFE), collective robotics simulation platform, ADELFE platform, OpenTool enhancement to agent-oriented design — *Modelling* of an aeronautical mechanical design tool (european project SYNAMEC) — UML enhancement to multiagent-oriented design — *Partnership* with TNI-Valiosys

COURSE PROGRAMS

Since 2019	**Artificial Intelligence (160h)** (Master 1,2) http://www.emse.fr/~picard/cours/ai/
Since 2017	**Distributed and mobile computing (25h)** (Master 1,2)
Since 2016	**Master Program on Cyber-Physical and Social Systems (CPS2)** (Master 1,2) http://www.emse.fr/~picard/cours/cps2/
Since 2016	**Multi-Agent Coordination (25h)** (Master 1,2)
2016-2018	**Internet-of-Things 40h)** (Master 2) http://www.emse.fr/~picard/cours/iot/
2014-2018	**Artificial Intelligence (80h)** (Master 1) http://www.emse.fr/~picard/cours/ai/
Since 2014	**Introduction to Formal Logics** (Licence 3)
2014-2016	**Ambient Computing** (Master 2) http://www.emse.fr/~picard/cours/ac/
2010-2014	**Information System Development** (Master 1) http://www.emse.fr/~picard/cours/2A/devsi/
2008-2014	**Object-oriented Programming** (Licence 3) http://www.emse.fr/~picard/cours/1A/java/
2008-2014	**ICT Project Management** (Master 1) http://www.emse.fr/~picard/cours/2A/svn-trac/ http://www.emse.fr/~picard/cours/2A/gp/
2011-2012	**Introduction to Artificial Intelligence** (Licence 3) http://www.emse.fr/~picard/cours/1A/IA/

Professional Activities & Services

Publications	http://www.emse.fr/~picard/#publications
Supervision	7 PhD Students, 6 Master Students
Chair	Program Chair (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	AAAI'20, ECAI'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, SASOŜT'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

Research Projects

Domains: Artificial intelligence (multiagent systems, reasoning, self-organisation), distributed problem solving and optimization, multiagent engineering and programming
Applications: Ambient intelligence, internet of things, machine-to-machine, smart grids, multidisciplinary design, autonomous car fleets

2020 — ***HyperAgent*** [France-Switzerland ANR]
The HyperAgents project aims to enable the deployment of world-wide hybrid communities of people and autonomous agents on the Web.
- *Funding: 239k€*
- *Consortium: Mines Saint-Etienne, INRIA, University of St Gallen*
- *Role: expertise in Distributed AI and Multiagent Systems*

2016-2019 — ***Collectiveware*** [Spanish Ministerio de Economia y Competitividad]
This project targets novel technologies that empower human collectives to operate micro-grids to achieve sustainable energy management by supporting their self-awareness, cooperation, and self-governance.
- *Collaborator and funder: IIIA-CSIC*

2014-2017 | ***ETHICAA*** [French ANR]
The objectives of the eThicAa project is twofold: (i) definition of what should be a moral autonomous agent and a system of moral autonomous agents, and (ii) definition and resolution of ethical conflicts that could occur 1) inside one moral agent, 2) between one moral agent and the (moral) rules of the system it belongs to, 3) between one moral agent and a human operator or user, 4) between several artificial (moral) agents including or not human agents. Ethical conflicts are characterized by the fact that there is no "good" way to solve them. Nevertheless when a decision must be made it should be an informed decision based on an assessment of the arguments and values at stake. When several agents are involved this may result in one agent taking over the (decision or action) authority from the others.

- *Funding: 244 561 €*
- *Consortium: GREYC, Onera, LIP6, Télécom Ecole de Management, Ardans*
- *Model and implementation of collective ethical mechanisms*
- https://ethicaa.greyc.fr

2013-2015 | ***Smart Energy Aware Systems*** **(SEAS)** [European ITEA2]
The objective of the SEAS project is to enable interoperability of systems producing energy, ICT and automation systems in consumption sites. It also aims to introduce solutions based on dynamic technologies to control and track the estimated energy consumption. A second goal is to explore business models and solutions that allow energy market players to integrate microgrid metworks and reactive customers, in particular intelligent decentralized systems (application ambient intelligence and smart cities).

- *Funding: 89 493 €*
- *Cooperation between 6 countries (Finland, France, Portugal, Romania, Spain, Turkey)*
- *Ontology for Smart Grids ; privacy in Smart Grids ; automatic negotiation*
- http://www.itea2.org/project/index/view?project=10156

2010-2012 | ***Multi-Agent Oriented Programming*** **(MAOP)** (CMIRA-RRA funded project)
The objective of the project "Multi-Agent Oriented Programming" Project funded by the Région Rhône Alpes CMIRA 2010, is to work on Multi-Agent Oriented Programming as a paradigm for building complex software systems, in particular smart/intelligent decentralized systems.

- *Supervision of a Master Student from "Politehnica" University of Bucharest (ERASMUS)*
- *Cooperation with DEIS, Alma Mater Studiorum Universita di Bologna*
- *Ambient Intelligence scenario description and prototype*
- http://iscod.emse.fr/maop/

2009-2013 | ***ID4CS*** (ANR-funded French national project)
ID4CS is an ANR (French national research agency) funded project having the ambition to propose a modeling and simulation environment for designing complex systems such as aircrafts.

- *Co-supervision of PhD student with University of Florida (multi-disciplinary optimization)*
- *Cooperation with IRIT, Airbus, IMT, ICA, Upetec*
- *Coordinator of the agent modeling work package*
- http://www.irit.fr/id4cs

2008-2012 | ***Web Intelligence*** (ISLE Cluster-RRA funded project)
The overall objective is to consolidate and structure the scientific community in Rhône-Alpes and synergy of cooperation on the topic of Web Intelligence.

- *Participation to the "Future Web" work package*
- *Organisation and demo chair of WI-IAT 2011*
- http://www.web-intelligence-rhone-alpes.org/

2001-2004 | ***ADELFE*** (RNTL-funded French national project)
The aim of the ADELFE toolkit is to guide you during the development of adaptive multi-agent systems (AMAS). ADELFE is now a known agent-oriented methodology and has been published in two state-of-the-art books on agent-oriented software engineering.

- *ADELFE is one of the most renown agent-oriented methodology*
- *Development of AdelfeToolkit to help designers to follow the ADELFE process*
- http://www.irit.fr/ADELFE/

Contracts

2010-2013	Orange Labs — *Funding: 24000€* — *Contract within the SensCity FUI project*
2015-2018	Orange Labs — *Funding: 30000€* — *Contract within the Open Home Infrastructure project*
2016	Renault Innovations — *Funding: 30000€* — *Contract to develop taxi swarms*

Cooperations

National	Université de Toulouse (IRIT, ICA, IMT), Université de Lille (LIFL), ENGIE, ONERA, Orange Labs, Upetec, Airbus, SNECMA
International	University of Florida (US), Universita di Bologna (IT), "Politehnica" University of Bucharest (RO), Federal University of Santa Catarina (BR), Artificial Intelligence Research Institute IIIA-CSIC (ES)

Supervision

Defended PhD	P. Rust (PhD Orange Labs, 2015-2018): *"Spontaneous coordination of connected objects in the Internet of Things"*, supervised by G. Picard [50%] and F. Ramparany [50%] S. Gillani (PhD UJM, 2013-2016): *"Context-aware negotiation in a distributed environment of independent power prosumers"*, supervised by Prof. F. Laforest [50%], G. Picard [50%] A. Sorici (Joint PhD UPB-EMSE, 2011-2015): *"Multi-Agent Context Management for Support of Ambient Computing Applications"*, supervised by Prof. A. Florea (UPB) [25%], Prof. O. Boissier [25%], G. Picard [50%] C. Persson (PhD ANRT CIFRE Orange Labs/EMSE, 2009-2014): *"Agile governance in M2M networks"*, defended on 31 october 2014, supervised by Prof. O. Boissier [25%], G. Picard [45%], F. Ramparany [30%] R. Yaich (PhD EMSE, 2009-2013): *"Adaptation and evolution of trust policies within virtual communities"*, defended on 29 october 2013, supervised by Prof. O. Boissier [25%], P. Jaillon [30%], G. Picard [45%] D. Villanueva (Joint PhD UF-EMSE, 2010-2013): *"Uncertainty propagation in multi-agent and multi-disciplinary optimisation"*, defended on 13 may 2013, supervised by DR CNRS R. Le Riche [33%], Prof. R. Haftka (UF) [33%], G. Picard [33%]
On-going PhD	A. Daoud (PhD EMSE, 2018-2021): *"Decentralized On-Demand Resource Allocation for Autonomous Vehicle Fleets"*, supervised by G. Picard [33%], F. Balbo [33%] and P. Gianessi [33%]
Masters	L. Cerqueira Martins (Master EMSE/UJM, 2012): *"Decentralized stable matching in mixed communities"* A. Sorici (Master Universitatea Politehnica Bucuresti, EURAMUS, 2011): *"Dynamic, reactive and pro-active context information aggregation in an AmI environment"* M. Bilal (Master UTT, Orange Labs, 2011): *"Multi-agent governance model for M2M networks: Application to a smart parking management system"* S. Villarreal (Master EMSE/UJM, 2010): *"Distributed constraint-based Optimisation and Social Choice"* G. Clair (Master EMSE/UJM, 2008): *"Self-organisation for manufacturing control based on multi-agent systems"* E. Kaddoum (Master IRIT/UPS, 2008): *"Self-regulation for manufacturing control using self-organising MAS"* F. Cornet (Master IRIT/UPS, 2006): *"Study of a frequency assignment problem using adaptive multi-agent systems"*

Committees	T. Tucci (12/11/18), A. Rantrua (03/02/17), A. Damamme (12/12/16), F. Bistaffa (22/04/16), S. Gillani (04/10/16), A. Sorici (11/09/15), S. Esparcia García (24/02/15), C. Persson (31/10/14), L. Pons (07/07/14), R. Yaich (29/10/13), T. Jorquera (22/10/13), D. Villanueva (13/05/13), S. Rougemaille (27/10/08)
Reviewer	F. Cruz, Spain (16/10/18) ; M. Velay, France (25/09/18) ; J. Savaux, France (25/10/17) ; R. Breil, Fance (03/10/17) ; A. Rantrua, France (03/02/17); A. Dammame, France (12/12/16); Filippo Bistaffa, Italy (22/04/16); M. Pujol Gonzalez, Spain (25/11/14)

PUBLICATIONS

Chapters

Guessom, Z., Mandiau, R., Mathieu, P., Boissier, O., Glize, P., Hamri, A., Pesty, S., Picard, G., Sansonnet, J.-P., Tessier, C., and Tranvouez, E. (2012). "Systèmes multi-agents et Simulation". In: *Information, Interaction, Intelligence : le point sur le i[3]*. Cépaduès Editions, pp. 76–120. URL: https://hal-amu.archives-ouvertes.fr/hal-01488019.

Glize, P. and Picard, G. (2011). "Self-Organisation in Constraint Problem Solving". In: *Self-organizing Software: From Natural to Artificial Adaptation*. Ed. by G. Serugendo, M.-P. Gleizes, and A. Karageorgos. Natural Computing Series. Springer. Chap. 14, pp. 347–377. ISBN: 978-3-642-17348-6. DOI: 10.1007/978-3-642-17348-6_14. URL: http://www.springer.com/computer/ai/book/978-3-642-17347-9.

Bernon, C., Gleizes, M.-P., and Picard, G. (2009). "Méthodes orientées agent et multi-agent". In: *Technologies des systèmes multi-agents et applications industrielles*. Ed. by A. El Fallah-Seghrouchni and J.-P. Briot. Collection IC2. Hermès. Chap. 2, pp. 45–76. URL: http://www.lavoisier.fr/livre/notice.asp?ouvrage=2138883.

Bernon, C., Camps, V., Gleizes, M.-P., and Picard, G. (2005). "Engineering Self-Adaptive Multi-Agent Systems: the ADELFE Methodology". In: *Agent-Oriented Methodologies*. Ed. by B. Henderson-Sellers and P. Giorgini. Idea Group Publishing. Chap. 7, pp. 172–202. DOI: 10.4018/978-1-59140-581-8.ch007. URL: http://www.igi-global.com/book/agent-oriented-methodologies/62.

Picard, G. and Gleizes, M.-P. (2004b). "The ADELFE Methodology – Designing Adaptive Cooperative Multi-Agent Systems". In: *Methodologies and Software Engineering for Agent Systems*. Ed. by F. Bergenti, M.-P. Gleizes, and F. Zambonelli. Vol. 11. Multiagent Systems, Artificial Societies, And Simulated Organizations. Kluwer Publishing. Chap. 8, pp. 157–176. ISBN: 1-4020-8057-3. DOI: 10.1007/1-4020-8058-1_11. URL: http://www.springerlink.com/content/ku3714781x30q625/.

Editing

Picard, G., Lang, C., and Marilleau, N., eds. (2018b). *Journées Francophones sur les Systèmes Multi-Agents (JFSMA'18) - Distribution et décentralisation*. Cépaduès, p. 250.

Vercouter, L. and Picard, G., eds. (2015). *Journées Francophones sur les Systèmes Multi-Agents (JFSMA'15) – Environnements socio-techniques*. Cépaduès.

Aldewereld, H., Dignum, V., and Picard, G., eds. (2009). *Engineering Societies in the Agents World X - 10th International Workshop, ESAW 2009, Utrecht, The Netherlands, November 18-20, 2009*. Vol. 5881. Lecture Notes in Artificial Intelligence (LNAI). Springer, p. 258. ISBN: 978-3-642-10202-8. DOI: 10.1007/978-3-642-10203-5. URL: http://www.springer.com/computer/ai/book/978-3-642-10202-8.

Artikis, A., Picard, G., and Vercouter, L., eds. (2008). *Engineering Societies in the Agents World IX - 9th International Workshop, ESAW 2008, Saint-Etienne, France, September 24-26, 2008, Revised Selected Papers*. Vol. 5485. Lecture Notes in Artificial Intelligence (LNAI). Springer, p. 281. ISBN: 978-3-642-02561-7. DOI: 10.1007/978-3-642-02562-4. URL: http://www.springer.com/computer/ai/book/978-3-642-02561-7.

Journals

Cerquides, J., Rodríguez-Aguilar, J. A., Emonet, R., and Picard, G. (2021). "Solving highly cyclic distributed optimization problems without busting the bank: a decimation-based approach". In: *Logic Journal of the IGPL* 29.1, pp. 72–95. ISSN: 1367-0751. DOI: 10.1093/jigpal/jzaa069. URL: https://doi.org/10.1093/jigpal/jzaa069.

Daoud, A., Balbo, F., Gianessi, P., and Picard, G. (2021b). "ORNInA: A Decentralized, Auction-based Multi-agent Coordination in ODT Systems". In: *AI Communications* 34.1, pp. 37–53. DOI: 10.3233/AIC-201579. URL: https://content.iospress.com/articles/ai-communications/aic201579.

Najjar, A., Mualla, Y., Singh, K., Picard, G., Calvaresi, D., Malhi, A., Galland, S., and Främling, K. (2021). "One-to-Many Negotiation QoE Management Mechanism for End-user Satisfaction". In: *IEEE Access*. in press (accepted), p. 15.

Gillani, S., Zimmermann, A., Picard, G., and Laforest, F. (2019). "A Query Language for Semantic Complex Event Processing: Syntax, Semantics and Implementation". In: *Semantic Web Journal* 10.1, pp. 53–93. DOI: 10.3233/SW-180313.

Pham Tran Anh, Q., Singh, K., Bradai, A., Picard, G., and Riggio, R. (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.

Najjar, A., Picard, G., and Boissier, O. (2018b). "Négociation multi-agents résistante aux pics de charge pour améliorer l'acceptabilité des services d'un fournisseur SaaS ouvert". In: *Revue d'Intelligence Artificielle* 32.5-6, pp. 603–625. DOI: 10.3166/ria.32.603-625.

Pham Tran Anh, Q., Singh, K., Rodríguez-Aguilar, J. A., Picard, G., Piamrat, K., Cerquides, J., and Viho, C. (2018). "AD3-GLAM: A Cooperative Distributed QoE-based Approach for SVC Video Streaming over Wireless Mesh Networks". In: *Ad Hoc Networks* 80, pp. 1–15. DOI: 10.1016/j.adhoc.2018.07.005. URL: https://www.sciencedirect.com/science/article/pii/S157087051830461X.

Picard, G., Balbo, F., and Boissier, O. (2018a). "Approches multiagents pour l'allocation de courses à une flotte de taxis autonomes". In: *Revue d'Intelligence Artificielle* 32.2, pp. 223–247. DOI: 10.3166/ria.32.223-247.

Cabri, G., Picard, G., and Suri, N. (2017). "SASO 2016: Selected, Revised, and Extended Best Papers". In: *TAAS* 12.3, pp. 1–3. DOI: 10.1145/3127332.

Yaich, R., Boissier, O., Picard, G., and Jaillon, P. (2017). "Impact of Social Influence on Trust Management within Communities of Agents". In: *Web Intelligence, An International Journal* 15.3, pp. 251–268. DOI: 10.3233/WEB-170361.

Galland, S., Balbo, F., Gaud, N., Rodríguez, S., Picard, G., and Boissier, O. (2016). "Environnement multidimensionnel pour contextualiser les interactions des agents dans le cadre de la modélisation du traffic routier urbain". In: *Revue d'Intelligence Artificielle* 30.1-2, pp. 81–108. DOI: 10.3166/RIA.30.81-108.

Sorici, A., Picard, G., Boissier, O., Zimmermann, A., and Florea, A. (2015a). "CONSERT : Applying Semantic Web Technologies to Context Modeling in Ambient Intelligence". In: *Computers and Electrical Engineering - An International Journal* 44, pp. 280–306. DOI: 10.1016/j.compeleceng.2015.03.012. URL: http://www.sciencedirect.com/science/article/pii/S0045790615000993.

Yaich, R., Boissier, O., Picard, G., and Jaillon, P. (2013). "Adaptiveness and Social-Compliance in Trust Management within Virtual Communities". In: *Web Intelligence and Agent Systems (WIAS)* 11.4, pp. 315–338. DOI: 10.3233/WIA-130278. URL: http://iospress.metapress.com/content/q2659685221703r7/?issue=4&genre=article&spage=315&issn=1570-1263&volume=11.

Everaere, P., Morge, M., and Picard, G. (2012). "Casanova : un comportement d'agent pour l'équité des mariages préservant la privacité". In: *Revue d'Intelligence Artificielle* 26.5, pp. 471–494. DOI: 10.3166/ria.26.471-494. URL: http://ria.revuesonline.com/article.jsp?articleId=17808.

Gleizes, M.-P., Bernon, C., Migeon, F., and Picard, G. (2008). "Méthodes de développement de systèmes multi-agents". In: *Génie Logiciel, GL & IS* 86, pp. 2–7.

Ottens, K., Picard, G., and Camps, V. (2006). "Transformation de modèles d'agents dans la méthode ADELFE : Des stéréotypes de conception à l'implémentation". In: *Revue Technique et Science Informatique – L'objet* 12.4, pp. 43–72. DOI: 10.3166/objet.12.4.43-72. URL: http://objet.e-revues.com/article.jsp?articleId=9174.

Picard, G. and Glize, P. (2006b). "Model and Analysis of Local Decision Based on Cooperative Self-Organization for Problem Solving". In: *Multiagent and Grid Systems – An International Journal (MAGS)* 2.3, pp. 253–265.

DOI: 10.3233/MGS-2006-2304. URL: http://content.iospress.com/articles/multiagent-and-grid-systems/mgs00042.

Picard, G., Bernon, C., Camps, V., and Gleizes, M.-P. (2003a). "ADELFE : Atelier de développement de logiciels à fonctionnalité émergente". In: *Revue Technique et Science Informatique* 22.4. Ed. by J. Briot and K. Ghedira, pp. 387–391. URL: http://tsi.revuesonline.com/article.jsp?articleId=4789.

Picard, G. and Gleizes, M.-P. (2003b). "Outils pour la réalisation de systèmes multi-agents adaptatifs dans le cadre de la méthode ADELFE". In: *Revue Technique et Science Informatique* 22.4. Ed. by J. Briot and K. Ghedira, pp. 249–253. URL: http://tsi.revuesonline.com/article.jsp?articleId=4777.

International conferences (peer-reviewed)

Daoud, A., Balbo, F., Gianessi, P., and Picard, G. (2021a). "A Generic Multi-Agent Model for Resource Allocation Strategies in Online On-Demand Transport with Autonomous Vehicles". In: *Proceedings of the 20th International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2021)*. Ed. by U. Endriss, A. Nowé, F. Dignum, and A. Lomuscio. Extended abstract. International Foundation for Autonomous Agents and Multiagent Systems.

Picard, G., Caron, C., Farges, J.-L., Guerra, J., Pralet, C., and Roussel, S. (2021). "Autonomous Agents and Multiagent Systems Challenges in Earth Observation Satellite Constellations". In: *Proceedings of the 20th International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2021)*. Ed. by U. Endriss, A. Nowé, F. Dignum, and A. Lomuscio. Blue Sky Ideas paper. International Foundation for Autonomous Agents and Multiagent Systems.

Rust, P., Picard, G., and Ramparany, F. (2020). "Resilient Distributed Constraint Optimization in Physical Multi-Agent Systems". In: *European Conference on Artificial Intelligence (ECAI)*. Vol. 325. Frontiers in Artificial Intelligence and Applications. IOS Press, pp. 195–202. DOI: 10.3233/FAIA200093. URL: http://ecai2020.eu/papers/108_paper.pdf.

— (2019a). "Installing Resilience in Distributed Constraint Optimization Operated by Physical Multi-Agent Systems". In: *Autonomous Agents and Multiagent Systems (AAMAS)*. International Foundation for Autonomous Agents and Multiagent Systems, pp. 2177–2179.

Cerquides, J., Emonet, R., Picard, G., and Rodríguez-Aguilar, J. A. (2018b). "DeciMaxSum: Using Decimation to Improve Max-Sum on Cyclic DCOPs". In: *Artificial Intelligence Research and Development - Current Challenges, New Trends and Applications, CCIA 2018, 21st International Conference of the Catalan Association for Artificial Intelligence, Alt Empordà, Catalonia, Spain, 8-10th October 2018*. Ed. by Z. Falomir, K. Gibert, and E. Plaza. Vol. 308. Frontiers in Artificial Intelligence and Applications. IOS Press, pp. 27–36. DOI: 10.3233/978-1-61499-918-8-27.

Najjar, A., Boissier, O., and Picard, G. (2017b). "AQUAMan: An Adaptive QoE-Aware Negotiation Mechanism for SaaS Elasticity Management". In: *Proceedings of the 16th International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2017)*. Ed. by S. Das, E. Durfee, K. Larson, and M. Winikoff. International Foundation for Autonomous Agents and Multiagent Systems, pp. 1655–1657. URL: http://dl.acm.org/citation.cfm?id=3091282.3091394.

Najjar, A., Mualla, Y., Picard, G., and Boissier, O. (2017c). "Cost-aware User-centric Acceptability Rate Adaptation for SaaS Services Using Multi-agent Systems". In: *IEEE/WIC/ACM International Conference on Web Intelligence (WI)*. ACM Press, pp. 331–339. DOI: 10.1145/3106426.3106485. URL: http://webintelligence2017.com. AR=38.8%.

Gillani, S., Picard, G., and Laforest, F. (2016a). "Continuous Graph Pattern Matching over Knowledge Graph Streams". In: *10th ACM International Conference on Distributed and Event-Based Systems (DEBS)*. ACM, pp. 214–225. DOI: 10.1145/2933267.2933306. AR=19%.

— (2016c). "SPECTRA: Continuous Query Processing for RDF Graph Streams Over Sliding Windows". In: *International Conference on Scientific and Statistical Database Management (SSDBM'16)*. ACM. DOI: 10.1145/2949689.2949701. AR=33%.

Rust, P., Picard, G., and Ramparany, F. (2016b). "Using Message-passing DCOP Algorithms to Solve Energy-efficient Smart Environment Configuration Problems". In: *Proceedings of the Twenty-Fifth International Joint Conference*

on Artificial Intelligence (IJCAI-16). Ed. by S. Kambhampati. AAAI Press, pp. 468–474. URL: http://www.ijcai.org/Proceedings/2016/. AR=24%.

Cerquides, J., Picard, G., and Rodríguez-Aguilar, J. A. (2015c). "Defining and solving the energy allocation problem with continuous prosumers". In: *Artificial Intelligence Research and Development - Proceedings of the 18th International Conference of the Catalan Association of Artificial Intelligence (CCIA'15)*. Ed. by E. Armengol, D. Boixader, and F. Grimaldo. Vol. 277. Frontiers in Artificial Intelligence and Applications. Catalan Association for Artificial Intelligence. IOS Press, pp. 29–38. DOI: 10.3233/978-1-61499-578-4-29. URL: http://ebooks.iospress.nl/volumearticle/40914.

— (2015d). "Designing a marketplace for the trading and distribution of energy in the smart grid". In: *14th International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*. International Foundation for Autonomous Agents and Multiagent Systems, pp. 1285–1293. URL: http://www.aamas-conference.org/Proceedings/aamas2015/forms/contents.htm#I4. AR=24.9%.

Galland, S., Balbo, F., Gaud, N., Rodríguez, S., Picard, G., and Boissier, O. (2015a). "A multidimensional environment implementation for enhancing agent interactions". In: *14th International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*. International Foundation for Autonomous Agents and Multiagent Systems, pp. 1801–1802. URL: http://www.aamas-conference.org/Proceedings/aamas2015/. AR=46.8%.

— (2015b). "Contextualize Agent Interactions by Combining Social and Physical Dimensions in the Environment". In: *13th International Conference on Practical Applications of Agents and Multi-Agent Systems (PAAMS'15)*. Ed. by Y. Demazeau and K. Decker. Vol. 9086. Lecture Notes in Artificial Intelligence (LNAI). Springer, pp. 107–119. DOI: 10.1007/978-3-319-18944-4_9. AR=20.8%.

Gillani, S., Kammoun, A., Subercaze, J., Singh, K., Picard, G., and Laforest, F. (2015). "Top-K Queries in RDF Graph-based Stream Processing with Actors". In: *ACM International Conference on Distributed Event-Based Systems (DEBS)*. ACM, pp. 293–300. DOI: 10.1145/2675743.2772587. AR=19%.

Picard, G., Persson, C., Boissier, O., and Ramparany, F. (2015). "Multi-agent Self-organization and Reorganization to Adapt M2M Infrastructures". In: *Ninth IEEE International Conference on Self-Adaptive and Self-Organizing Systems (SASO'15)*. IEEE Computer Society, pp. 91–100. DOI: 10.1109/SASO.2015.17. AR=18.5%.

Sorici, A., Boissier, O., Picard, G., and Florea, A. (2015d). "Multi-Agent based Context Provisioning Deployment in AmI Applications". In: *13th International Conference on Practical Applications of Agents and Multi-Agent Systems (PAAMS'15)*. Ed. by Y. Demazeau and K. Decker. Vol. 9086. Lecture Notes in Artificial Intelligence (LNAI). Springer. DOI: 10.1007/978-3-319-18944-4_19. AR=20.8%.

— (2015e). "Policy-based Adaptation of Context Provisioning in AmI". In: *Ambient Intelligence - Software and Applications - 6th International Symposium on Ambient Intelligence (ISAmI'15)*. Ed. by A. Mohamed, P. Novais, A. Pereira, G. Villarrubia González, and A. Fernández-Caballero. Vol. 376. Advances in Intelligent Systems and Computing. Springer International Publishing, pp. 33–43. DOI: 10.1007/978-3-319-19695-4_4.

Belloni, A., Berger, A., Boissier, O., Bonnet, G., Bourgne, G., Chardel, P., Cotton, J., Evreux, N., Ganascia, J.-G., Jaillon, P., Mermet, B., Picard, G., Rever, B., Simon, G., Swarte, T. de, Tessier, C., Vexler, F., Voyer, R., and Zimmermann, A. (2014). "Towards A Framework To Deal With Ethical Conflicts In Autonomous Agents And Multi-Agent Systems". In: *12th International Conference on Computer Ethics and Philosophical Enquiry (CEPE'14)*, pp. 1–10.

Everaere, P., Morge, M., and Picard, G. (2013). "Minimal Concession Strategy for Reaching Fair, Optimal and Stable Marriages". In: *Proceedings of the 20th International Conference on Autonomous Agents and Multiagent Systems (AAMAS'13)*. Ed. by T. Ito, C. Jonker, M. Gini, and O. Shehory. International Foundation for Autonomous Agents and Multiagent Systems, pp. 1319–1320. URL: http://dl.acm.org/citation.cfm?id=2484920.2485203. AR=44.28%.

Villanueva, D., Le Riche, R., Picard, G., and Haftka, R. T. (2013a). "Dynamic Design Space Partitioning for Optimization of an Integrated Thermal Protection System". In: *9th AIAA Multidisciplinary Design Optimization Specialist Conference co-located with the 54th AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics, and Materials Conference (SDM'13)*. AIAA. DOI: 10.2514/6.2013-1534.

Persson, C., Picard, G., Ramparany, F., and Boissier, O. (2012a). "A JaCaMo-Based Governance of Machine-to-Machine Systems". In: *Advances on Practical Applications of Agents and Multiagent Systems, Proc. of the 10th International Conference on Practical Applications of Agents and Multi-Agent Systems (PAAMS 12)*. Ed. by Y.

Demazeau, J. P. Müller, J. M. C. Rodríguez, and J. B. Pérez. Vol. 155. Advances in Soft Computing Series. Springer, pp. 161–168. DOI: 10.1007/978-3-642-28786-2_18. AR=30.6%.

Villanueva, D., Le Riche, R., Picard, G., and Haftka, R. T. (2012a). "Dynamic Partitioning for Balancing Exploitation and Exploration in Constrained Optimization: A Multi-Agent Approach". In: *14th AIAA/ISSMO Multidisciplinary Analysis and Optimization Conference (MAO)*. AIAA. DOI: 10.2514/6.2012-5440.

— (2012c). "Surrogate-Based Agents for Constrained Optimization". In: *14th AIAA Non-Deterministic Approaches Conference, Honolulu, HI*. AIAA. DOI: 10.2514/6.2012-1935.

Yaich, R., Boissier, O., Jaillon, P., and Picard, G. (2012a). "An Adaptive and Socially-Compliant Trust Management System for Virtual Communities". In: *The 27th ACM Symposium On Applied Computing (SAC 2012)*. ACM Press, pp. 2022–2028. DOI: 10.1145/2245276.2232112. AR=26%.

— (2012b). "An Agent Based Trust Management System for Multi-Agent Based Virtual Communities". In: *Advances on Practical Applications of Agents and Multiagent Systems, Proc. of the 10th International Conference on Practical Applications of Agents and Multi-Agent Systems (PAAMS 12)*. Ed. by Y. Demazeau, J. P. Müller, J. M. C. Rodríguez, and J. B. Pérez. Vol. 155. Advances in Soft Computing Series. Springer, pp. 217–223. DOI: 10.1007/978-3-642-28786-2_24. AR=30.6%.

Morge, M. and Picard, G. (2011). "Privacy-Preserving Strategy for Negotiating Stable, Equitable and Optimal Matchings". In: *Advances on Practical Applications of Agents and Multiagent Systems, Proc. of the 9th International Conference on Practical Applications of Agents and Multi-Agent Systems (PAAMS 11)*. Advances in Intelligent and Soft-Computing. Springer, pp. 97–102. DOI: 10.1007/978-3-642-19875-5. URL: http://www.springerlink.com/content/978-3-642-19874-8#section=867062&page=1&locus=0. AR=48.1%.

Persson, C., Picard, G., and Ramparany, F. (2011b). "A Multi-Agent Organization for the Governance of Machine-To-Machine Systems". In: *IEEE/WIC/ACM International Conference on Intelligent Agent Technology (IAT'11)*. IEEE Computer Society, pp. 421–424. DOI: 10.1109/WI-IAT.2011.161. AR=21%.

Villanueva, D., Le Riche, R., Picard, G., Haftka, R. T., and Sankar, B. V. (2011b). "Decomposition of System Level Reliability-Based Design Optimization to Reduce the Number of Simulations". In: *ASME 2011 International Design Engineering Technical Conferences & Computers and Information in Engineering Conference, Washington, DC, USA*. ASME, pp. 117–126. DOI: 10.1115/DETC2011-47815.

Kaddoum, E., Gleizes, M.-P., Georgé, J.-P., and Picard, G. (2009b). "Characterizing and Evaluating Problem Solving Self-* Systems". In: *International Conference on Adaptive and Self-adaptive Systems and Applications (ADAPTIVE 2009), 2009 Computation World: Future Computing, Service Computation, Cognitive, Adaptive, Content, Patterns, Athens, Greece, November 15-November 20*. IEEE Computer Society, pp. 137–145. ISBN: 978-0-7695-3862-4. DOI: 10.1109/ComputationWorld.2009.100.

Clair, G., Gleizes, M.-P., Kaddoum, E., and Picard, G. (2008b). "Self-Regulation in Self-Organising Multi-Agent Systems for Adaptive and Intelligent Manufacturing Control". In: *Second IEEE International Conference on Self-Adaption and Self-Organization (SASO 2008), Venice, Italy, 20-24 October 2008*. IEEE Computer Society, pp. 107–116. DOI: 10.1109/SASO.2008.19. URL: http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=4663415. AR=27.1%.

Picard, G., Gleizes, M.-P., and Glize, P. (2007b). "Distributed Frequency Assignment Using Cooperative Self-Organization". In: *First IEEE International Conference on Self-Adaptive and Self-Organizing Systems (SASO'07), Boston, Mass., USA, July 9-11, 2007*. IEEE Computer Society, pp. 183–192. DOI: 10.1109/SASO.2007.18. URL: http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=4274902. AR=20.8%.

Picard, G. and Gleizes, M.-P. (2005c). "Cooperative Self-Organization to Design Robust and Adaptive Collectives". In: *Second International Conference on Informatics in Control, Automation and Robotics (ICINCO'05), 14-17 September 2005, Barcelona, Spain, Volume I*. INSTICC Press, pp. 236–241. AR=45.07%.

Picard, G., Bernon, C., and Gleizes, M.-P. (2005d). "Emergent Timetabling Organization". In: *Multi-Agent Systems and Applications IV - 4th International Central and Eastern European Conference on Multi-Agent Systems (CEEMAS'05), 15-17 September 2005, Budapest, Hungary*. Vol. 3690. Lecture Notes in Artificial Intelligence (LNAI). Springer-Verlag, pp. 440–449. DOI: 10.1007/11559221_44. URL: http://www.springerlink.com/content/bcvm1jjad712erpv/. AR=40.7%.

Picard, G. and Glize, P. (2005f). "Model and Experiments of Local Decision Based on Cooperative Self-Organization". In: *Second International Indian Conference on Artificial Intelligence (IICAI'05), 20-22 December 2005, Pune, India*. Ed. by Prasad, B., 3009–3024. ISBN: 0-9727412-1-6. AR=35%.

Capera, D., Picard, G., Gleizes, M.-P., and Glize, P. (2004). "Applying ADELFE Methodology to a Mechanism Design Problem". In: *Third Joint Conference on Multi-Agent System (AAMAS'04)*. New York, USA: IEEE Computer Society, pp. 1508–1509. ISBN: 1-58113-864-4. DOI: 10.1109/AAMAS.2004.66. URL: http://portal.acm.org/citation.cfm?id=1019006. AR=49.7%.

Picard, G., Bernon, C., and Gleizes, M.-P. (2004a). "Cooperative Agent Model within ADELFE Framework: An Application to a Timetabling Problem". In: *Third Joint Conference on Multi-Agent System (AAMAS'04)*. New York, USA: IEEE Computer Society, pp. 1506–1507. ISBN: 1-58113-864-4. DOI: 10.1109/AAMAS.2004.93. URL: http://portal.acm.org/citation.cfm?id=1019005. AR=49.7%.

Picard, G. and Gleizes, M.-P. (2002). "An Agent Architecture to Design Self-Organizing Collectives: Principles and Application". In: *AISB'02 Symposium on Adaptive Multi-Agent Systems (AAMASII)*. Ed. by D. Kazakov, D. Kudenko, and E. Alonso. Vol. 2636. Lecture Notes in Artificial Intelligence (LNAI). Univerity of London, UK: Springer-Verlag, pp. 141–158. ISBN: 3-540-40068-0. DOI: 10.1007/3-540-44826-8_9. URL: http://www.springerlink.com/content/8gqx5072vmbl32ta/.

International workshops (peer-reviewed)

Daoud, A., Balbo, F., Gianessi, P., and Picard, G. (2020b). "Decentralized Insertion Heuristic with Runtime Optimization for On-demand Transport Scheduling". In: *ATT2020 (11th International Workshop on Agents in Traffic and Transportation)*. Ed. by I. Dusparic, M. Lujak, F. Klügl, and G. Vizzari. CEUR Workshop Proceedings, pp. 9–15. URL: https://sites.google.com/unimib.it/att2020/.

Picard, G. and Rust, P. (2020b). "Assessing Performances of Incomplete DCOP Solvers on HetNet User Association Problems". In: *Declarative Problem Solving Workshop (DPSW@ECAI'20)*.

Rust, P., Picard, G., and Ramparany, F. (2019b). "pyDCOP, a DCOP library for IoT and dynamic systems". In: *International Workshop on Optimisation in Multi-Agent Systems (OptMAS@AAMAS 2019)*.

Cerquides, J., Emonet, R., Picard, G., and Rodríguez-Aguilar, J. A. (2018c). "Improving Max-Sum through Decimation to Solve Loopy Distributed Constraint Optimization Problems". In: *International Workshop on Optimisation in Multi-Agent Systems (OptMAS@AAMAS 2018)*. URL: http://www-personal.umich.edu/~fioretto/cfp/OPTMAS18/papers/paper_1.pdf.

Najjar, A., Mualla, Y., Singh, K., and Picard, G. (2018c). "One-to-Many Multi-agent Negotiation and Coordination Mechanisms to Manage User Satisfaction". In: *International Workshop on Agent-based Complex Automated Negotiations (ACAN2018)*.

Rust, P., Picard, G., and Ramparany, F. (2018c). "Self-Organized and Resilient Distribution of Decisions over Dynamic Multi-Agent Systems". In: *International Workshop on Optimisation in Multi-Agent Systems (OptMAS@AAMAS 2018)*. URL: http://www-personal.umich.edu/~fioretto/cfp/OPTMAS18/papers/paper_13.pdf.

Najjar, A., Boissier, O., and Picard, G. (2017a). "An Adaptive One-to-many Negotiation to Improve The Service Acceptability of an Open SaaS Provider". In: *International Workshop on Agent-based Complex Automated Negotiations (ACAN2017)*. URL: http://www.itolab.nitech.ac.jp/ACAN2017/.

— (2017d). "Elastic and Load-Spike Proof One-to-Many Negotiation to Improve the Service Acceptability of an Open SaaS Provider". In: *Autonomous Agents and Multiagent Systems – AAMAS 2017 Workshops, Best Papers, Sao Paulo, Brazil, May 8-12, 2017, Revised Selected Papers*. Ed. by G. Sukthankar and J. Rodriguez-Aguilar. Vol. 10642. LNAI. Extended Version. Springer, pp. 1–20. DOI: 10.1007/978-3-319-71682-4_1.

Rust, P., Picard, G., and Ramparany, F. (2017d). "On the Deployment of Factor Graph Elements to Operate Max-Sum in Dynamic Ambient Environments". In: *8th International Workshop on Optimisation in Multi-Agent Systems (OPTMAS 2017, in conjunction with AAMAS 2017)*. URL: https://www.cs.nmsu.edu/~wyeoh/OPTMAS2017/.

— (2017c). "On the Deployment of Factor Graph Elements to Operate Max-Sum in Dynamic Ambient Environments". In: *Autonomous Agents and Multiagent Systems – AAMAS 2017 Workshops, Best Papers, Sao Paulo, Brazil, May 8-12, 2017, Revised Selected Papers*. Ed. by G. Sukthankar and J. Rodriguez-Aguilar. Vol. 10642. Lecture Notes in Artificial Intelligence (LNAI). Extended Version. Springer, pp. 116–137. DOI: 10.1007/978-3-319-71682-4_8.

Gillani, S., Picard, G., and Laforest, F. (2016b). "DIONYSUS: Towards Query-aware Distributed Processing of RDF Graph Streams". In: *Fifth International Workshop on Querying Graph Structured Data (GraphQ'16) at EDBT/ICDT 2016 Joint Conference*. URL: http://ceur-ws.org/Vol-1558/paper22.pdf.

Belloni, A., Berger, A., Boissier, O., Bonnet, G., Bourgne, G., Chardel, P., Cotton, J., Evreux, N., Ganascia, J.-G., Jaillon, P., Mermet, B., Picard, G., Rever, B., Simon, G., Swarte, T. de, Tessier, C., Vexler, F., Voyer, R., and Zimmermann, A. (2015). "Dealing With Ethical Conflicts In Autonomous Agents And Multi-Agent Systems". In: *Workshop on AI and Ethics at The Twenty-Ninth AAAI Conference on Artificial Intelligence (AAAI'15)*. AR=40%.

Cerquides, J., Picard, G., and Rodríguez-Aguilar, J. A. (2015b). "Defining a Continuous Marketplace for the Trading and Distribution of Energy in the Smart Grid". In: *Second Workshop on Interfaces between Multiagent Systems, Machine Learning and Complex Systems*, pp. 37–48.

Sorici, A., Picard, G., and Florea, A. (2015c). "Multi-Agent Based Context Management in AmI Applications". In: *International Workshop on Agent Technology for Ambient Intelligence at the the 20th International Conference on Control Systems and Computer Science (CSCS)*. IEEE CPS, pp. 727–734. DOI: 10.1109/CSCS.2015.65. URL: http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=7168506. AR=50%.

Gillani, S., Laforest, F., and Picard, G. (2014a). "A Generic Ontology for Prosumer-Oriented Smart Grid". In: *3rd Workshop on Energy Data Management at 17th International Conference on Extending Database Technology*. CEUR Workshop Proceedings, pp. 134–139. URL: http://ceur-ws.org/Vol-1133/#paper-21.

Gillani, S., Picard, G., and Laforest, F. (2014b). "IntelSCEP: Towards an Intelligent Semantic Complex Event Processing Framework for Prosumer-Oriented SmartGrid". In: *International Workshop on Web Intelligence and Smart Sensing (IWWISS'14)*. Ed. by P. Maret and S. Honda. ACM Digital Library. DOI: 10.1145/2637064.2637110. URL: http://dl.acm.org/citation.cfm?id=2637110&CFID=422236107&CFTOKEN=63603169.

— (2014c). "Towards a Distributed Semantically Enriched Complex Event Processing and Pattern Matching". In: *3rd International Workshop on Ordering and Reasoning (OrdRing'14)*. CEUR Workshop Proceedings. URL: http://www.streamreasoning.org/events/ordring2014.

Persson, C., Picard, G., Ramparany, F., and Boissier, O. (2014). "A Multi-Agent based Governance of Machine-to-Machine Systems". In: *International Workshop on Web Intelligence and Smart Sensing (IWWISS'14)*. Ed. by P. Maret and S. Honda. ACM Digital Library, pp. 1–2. DOI: 10.1145/2637064.2637112. URL: http://dl.acm.org/citation.cfm?id=2637112&CFID=422236107&CFTOKEN=63603169.

Sorici, A., Picard, G., and Boissier, O. (2014). "Towards an Agent enabled Context Management Middleware". In: *International Workshop on Web Intelligence and Smart Sensing (IWWISS'14)*. Ed. by P. Maret and S. Honda. ACM Digital Library. DOI: 10.1145/2637064.2637111. URL: http://dl.acm.org/citation.cfm?id=2637111&CFID=422236107&CFTOKEN=63603169.

Rivière, J., Le Riche, R., and Picard, G. (2013). "LOOM, an algorithm for finding local optima of expensive functions". In: *International France-China Workshop, NICST'2013 (New and smart Information Communication Science and Technology to support Sustainable Development), 18-20 September 2013, Clermont Ferrand, France*. LIMOS/UPB. ISBN: 978-2-9544948-0-7.

Sorici, A., Boissier, O., Picard, G., and Zimmermann, A. (2013). "Applying Semantic Web Technologies to Context Modeling in Ambient Intelligence". In: *Evolving Ambient Intelligence: AmI 2013 Workshops, Dublin, Ireland, December 3-5, 2013. Revised Selected Papers*. Ed. by M. O'Grady, H. Vahdat-Nejad, K. Wolf, M. Dragone, J. Ye, C. Röcker, and G. O'Hare. Communications in Computer and Information Science 413. Springer, pp. 217–229. DOI: 10.1007/978-3-319-04406-4_22. URL: http://www.percam.org.

Villanueva, D., Le Riche, R., Picard, G., and Haftka, R. T. (2013c). "Self-organized Space Partitioning for Multi-Agent Optimization". In: *6th International Workshop on Optimisation in Multi-Agent Systems (OPTMAS 2013, in conjunction with AAMAS 2013 6th-7th May 2013)*.

Bilal, M., Persson, C., Ramparany, F., Picard, G., and Boissier, O. (2012). "Multi-Agent based governance model for Machine-to-Machine networks in a smart parking management system". In: *Proceedings of IEEE International Conference on Communications, ICC 2012, Ottawa, ON, Canada, June 10-15, 2012, 3rd IEEE International Workshop on SmArt COmmunications in NEtwork Technologies ('ICC'12 WS - SaCoNet-III')*. IEEE Computer Society, pp. 6468–6472. DOI: 10.1109/ICC.2012.6364789.

Persson, C., Picard, G., Ramparany, F., and Boissier, O. (2012b). "Multi-Agent Based Governance of Machine-to-Machine Systems". In: *9th European Workshop (EUMAS 2011), Revised Selected Papers*. Ed. by M. Cossentino, M. Kaisers, K. Tuyls, and G. Weiss. Vol. 7541. Lecture Notes in Computer Science (LNCS). Springer, pp. 205–220. DOI: 10.1007/978-3-642-34799-3_14. URL: http://www.springer.com/computer/ai/book/978-3-642-34798-6. AR=26%.

Sorici, A., Picard, G., Boissier, O., Santi, A., and Hübner, J. F. (2012). "Multi-Agent Oriented Reorganisation within the JaCaMo infrastructure". In: *The 3rd International Workshop on Infrastructures and Tools for Multiagent Systems (ITMAS 2012)*.

Persson, C., Picard, G., Ramparany, F., and Boissier, O. (2011a). "A Multi-Agent Organization for the Governance of Machine-to-Machine Systems". In: *European Workshop on Multi-agent Systems (EUMAS'11)*.

Sorici, A., Boissier, O., Picard, G., and Santi, A. (2011). "Exploiting the JaCaMo Framework for Realising an Adaptive Room Management Application". In: *AGERE! (Actors and aGEnts REloaded) Programming Systems, Languages, and Applications based on Actors, Agents, and Decentralized Control workshop at ACM SPLASH 2011*. ACM Press, pp. 239–242. DOI: 10.1145/2095050.2095088.

Yaich, R., Boissier, O., Picard, G., and Jaillon, P. (2011b). "Social-Compliance in Trust Management within Virtual Communities". In: *European Workshop on Multi-agent Systems (EUMAS'11)*.

Yaich, R., Boissier, O., Jaillon, P., and Picard, G. (2011c). "Social-Compliance in Trust Management within Virtual Communities". In: *3rd International Workshop on Web Intelligence and Communities (WI&C'11) at the International Conferences on Web Intelligence and Intelligent Agent Technology (WI-IAT 2011)*. IEEE Computer Society, pp. 322–325. DOI: 10.1109/WI-IAT.2011.212.

Georgé, J.-P, Gleizes, M.-P., Kaddoum, E., Masciardi, L., Picard, G., and Raibulet, C. (2010). "Criteria for Self-* Systems Evaluation: a Unified Proposal". In: *ICSE 2010 Workshop on Software Engineering for Adaptive and Self-managing Systems (SEAMS), Cape Town, South Africa*. ACM/IEEE, pp. 29–38. DOI: 10.1145/1808984.1808988.

Picard, G., Hübner, J. F., Boissier, O., and Gleizes, M.-P. (2009a). "Reorganisation and Self-organisation in Multi-Agent Systems". In: *International Workshop on Organizational Modeling (OrgMod'09)*, pp. 66–80. AR=57.3%.

Garcia Ruiz, J. E., Georgé, J.-P., and Picard, G. (2008). "The AmICriM Project: A Truly Body Area Network Application". In: *First International Workshop on Sensor Networks (SN 2008), in conjunction with ICCCN 2008, August 4-7, Virgin Islands, USA*.

Hübner, J. F., Bordini, R. H., and Picard, G. (2008a). "Jason and MOISE+: Organisational programming in the Agent Contest 2008". In: *Dagstuhl Seminar on Programming Multi-Agent Systems*. Ed. by R. Bordini, M. Dastani, J. Dix, and A. El Fallah-Seghrouchni. Vol. 08361.

— (2008b). "Using jason and MOISE+ to develop a team of cowboys". In: *Proceedings of the Seventh international Workshop on Programming Multi-Agent Systems (ProMAS 08), Agent Contest, held with The Seventh International Joint Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2008)*. Ed. by K. Hindriks, A. Pokahr, and S. Sardina, pp. 238–242. DOI: 10.1007/978-3-642-03278-3. URL: http://www.springerlink.com/content/t402t436636r/#section=185314&page=1&locus=0.

Bernon, C., Gleizes, M.-P., and Picard, G. (2006). "Enhancing Self-Organising Emergent Systems Design with Simulation". In: *Seventh International Workshop on Engineering Societies in the Agents World (ESAW'06), Dublin, Ireland from the 6th - 8th September, 2006*. Lecture Notes in Computer Science (LNCS) 4457. Springer-Verlag, pp. 284–299. DOI: 10.1007/978-3-540-75524-1. URL: http://www.springerlink.com/content/978-3-540-75522-7/#section=347810&page=1&locus=0. AR=58%.

Capera, D., Picard, G., Gleizes, M.-P., and Glize, P. (2005). "A Sample Application of ADELFE Focusing on Analysis and Design : The Mechanism Design Problem". In: *Fifth International Workshop on Engineering Societies in the Agents World (ESAW'04), 20-22 October 2004, Toulouse, France*. Ed. by M.-P. Gleizes, A. Omicini, and F. Zambonelli. Vol. 3451. Lecture Notes in Artificial Intelligence (LNAI). Springer-Verlag, pp. 231–244. DOI: 10.1007/11423355_17. URL: http://www.springerlink.com/content/3kc056tmvlbf78bn/. AR=51.1%.

Picard, G. (2005a). "Cooperative Agent Model Instantiation to Collective Robotics in ADELFE". In: *Fifth International Workshop on Engineering Societies in the Agents World (ESAW'04), 20-22 October 2004, Toulouse, France*. Ed. by M.-P. Gleizes, A. Omicini, and F. Zambonelli. Vol. 3451. Lecture Notes in Artificial Intelligence (LNAI).

Springer-Verlag, pp. 209–221. DOI: 10.1007/11423355_15. URL: http://www.springerlink.com/content/5ek2vg08a3qcyxuw/. AR=51.1%.

Picard, G. and Gleizes, M.-P. (2005a). "Cooperative Self-Organization: Designing Robust and Adaptive Robotic Collectives". In: *3rd European Workshop on Multi-Agent Systems (EUMAS'05), 7-8 December, Brussels, Belgium*. Koninklijke Vlaamse Academie van Belie voor Wetenschappen en Kunsten, pp. 495–496.

Picard, G. and Glize, P. (2005b). "Cooperative Self-Organization: Modeling and Experiments of Local Decision to Solve Distributed Problems". In: *3rd European Workshop on Multi-Agent Systems (EUMAS'05), 7-8 December, Brussels, Belgium*. Koninklijke Vlaamse Academie van Belie voor Wetenschappen en Kunsten, pp. 497–498.

Picard, G., Bernon, C., and Gleizes, M.-P. (2005e). "ETTO: Emergent Timetabling by Cooperative Self-Organization". In: *Engineering Self-Organizing Applications – Third International Workshop (ESOA) at the Fourth International Joint Conference on Autonomous Agents and Multi-Agents Systems (AAMAS'05), July 2005, Utrecht, Netherlands*. Vol. 3910. Lecture Notes in Artificial Intelligence (LNAI). Springer-Verlag, pp. 31–45. DOI: 10.1007/11734697_3. URL: http://www.springerlink.com/content/v5q7611867rq3011/. AR=47%.

Picard, G., Mellouli, S., and Gleizes, M.-P. (2005h). "Techniques for Multi-Agent System Reorganization". In: *Sixth International Workshop on Engineering Societies in the Agents World (ESAW'05), 26-28 October 2005, Kuşadası, Aydın, Turkey*. Ed. by O. Dikenelli, M.-P. Gleizes, and A. Ricci. Vol. 3963. Lecture Notes in Artificial Intelligence (LNAI). Springer-Verlag, pp. 142–152. DOI: 10.1007/11759683_9. URL: http://www.springerlink.com/content/u5t7k34040506374/. AR=44%.

Bernon, C., Camps, V., Gleizes, M.-P., and Picard, G. (2003a). "Designing Agents' Behaviours within the Framework of ADELFE Methodology". In: *Fourth International Workshop on Engineering Societies in the Agents World (ESAW'03)*. Ed. by A. Omicini, P. Petta, and J. Pitt. Vol. 3071. Lecture Notes in Artificial Intelligence (LNAI). Imperial College London, UK: Springer-Verlag, pp. 311–327. DOI: 10.1007/978-3-540-25946-6_20. URL: http://www.springerlink.com/content/m4ya2cvcjx1grhcm/. AR=32.2%.

— (2003b). "Tools for Self-Organizing Applications Engineering". In: *Engineering Self-Organizing Applications – First International Workshop (ESOA) at the Second International Joint Conference on Autonomous Agents and Multi-Agents Systems (AAMAS'03)*. Ed. by G. Di Marzo Serugendo, A. Karageorgos, O. F. Rana, and F. Zambonelli. Vol. 2977. Lecture Notes in Artificial Intelligence (LNAI). Melbourne, Australia: Springer-Verlag, pp. 283–298. ISBN: 3-540-21201-9. DOI: 10.1007/978-3-540-24701-2_19. URL: http://springerlink.metapress.com/content/0muewchfkxx1nym0/.

Georgé, J.-P., Picard, G., Gleizes, M.-P., and Glize, P. (2003). "Living Design for Open Computational Systems". In: *International Workshop on Theory And Practice of Open Computational Systems (TAPOCS) at 12th IEEE International Workshop on Enabling Technologies: Infrastructure for Collaborative Enterprises (WETICE'03)*. Ed. by M. Fredriksson, A. Ricci, R. Gustavsson, and A. Omicini. Linz, Austria: IEEE Computer Society, pp. 389–394. ISBN: 0-7695-1963-6. DOI: 10.1109/ENABL.2003.1231442. URL: http://ieeexplore.ieee.org/xpl/articleDetails.jsp?arnumber=1231442. AR=76.7%.

Picard, G. (2003b). "UML Stereotypes Definition and AUML Notations for ADELFE Methodology with OpenTool". In: *The First European Workshop on Multi-Agent Systems (EUMAS'03), St Catherine College, Oxford, 18th and 19th December 2003*.

Bernon, C., Gleizes, M.-P., Peyruqueou, S., and Picard, G. (2002a). "ADELFE: a Methodology for Adaptive Multi-Agent Systems Engineering". In: *Third International Workshop on Engineering Societies in the Agents World (ESAW'02)*. Ed. by P. Petta, R. Tolksdorf, and F. Zambonelli. Vol. 2577. Lecture Notes in Computer Science (LNCS). Madrid, Spain: Springer-Verlag, pp. 156–169. ISBN: 3-540-14009-3. DOI: 10.1007/3-540-39173-8_12. URL: http://www.springerlink.com/content/rheud1raydumk5g1/. AR=57.1%.

Bernon, C., Gleizes, M.-P., Picard, G., and Glize, P. (2002b). "The ADELFE Methodology For an Intranet System Design". In: *Fourth International Bi-Conference Workshop on Agent-Oriented Information Systems (AOIS-2002)*. Ed. by P. Giorgini, Y. Lespérance, G. Wagner, and E. Yu. Vol. 57. CAiSE'02. Toronto, Canada: CEUR Workshop Proceedings. URL: http://sunsite.informatik.rwth-aachen.de/Publications/CEUR-WS/Vol-57/.

National conferences (peer-reviewed)

Daoud, A., Balbo, F., Gianessi, P., and Picard, G. (2020a). "Approche décentralisée d'insertion avec amélioration continue de laqualité de la solution pour un système TAD". In: *Conférence Nationale d'Intelligence Artificielle et*

Rencontres des Jeunes Chercheurs en Intelligence Artificielle (RJCIA). Association Française pour l'Intelligence Artifcielle (AFIA), pp. 99–106. URL: http://pfia2020.fr/rjcia-2020/.

Picard, G. and Rust, P. (2020a). "Analyse des performances d'algorithmes DCOP pour l'association d'utilisateurs de réseaux HetNets". In: *Journées Francophones sur les Systèmes Multi-Agents*. Cépaduès. AR=37.5%.

Rust, P., Picard, G., and Ramparany, F. (2019c). "Résilience et auto-réparation de processus de décisions multi-agents". In: *Journées Francophones sur les Systèmes Multi-Agents*. Cépaduès. URL: https://www.cepadues.com/livres/JFSMA-2019.-SystÃÍmes-distribuÃl's,-embarquÃl's-et-diffus-9782364937192.html. AR=40%.

Cerquides, J., Emonet, R., Picard, G., and Rodríguez-Aguilar, J. A. (2018a). "DeciMaxSum : Décimer pour résoudre des DCOP cycliques plus efficacement". In: *Journées Francophones sur les Systèmes Multi-Agents*. Cépaduès, pp. 63–72. URL: https://www.cepadues.com/livres/jfsma-2018-distribution-decentralisation-9782364936751.html. AR=21.15%.

Najjar, A., Mualla, Y., Picard, G., and Singh, K. (2018a). "Négociation multi-agent « un-à-plusieurs » et mécanismes de coordination pour la gestion de la satisfaction des utilisateurs d'un service". In: *Journées Francophones sur les Systèmes Multi-Agents*. Cépaduès, pp. 95–104. URL: https://www.cepadues.com/livres/jfsma-2018-distribution-decentralisation-9782364936751.html. AR=38.46%.

Picard, G. (2018). "Optimisation sous contraintes distribuée : une introduction au domaine". In: *Journées Francophones sur les Systèmes Multi-Agents*. Cépaduès, pp. 43–52. URL: https://www.cepadues.com/livres/jfsma-2018-distribution-decentralisation-9782364936751.html. AR=21.15%.

Rust, P., Picard, G., and Ramparany, F. (2018b). "Mise en place d'une décision collective résiliente sur une infrastructure IoT à l'aide du framework pyDCOP". In: *Journées Francophones sur les Systèmes Multi-Agents*. Cépaduès, pp. 223–224. URL: https://www.cepadues.com/livres/jfsma-2018-distribution-decentralisation-9782364936751.html. AR=85%.

Najjar, A., Boissier, O., and Picard, G. (2017e). "Négociation one-to-many adaptative pour améliorer l'acceptabilité des services d'un fournisseur SaaS". In: *25es Journées Francophones sur les Systèmes Multi-Agents (JFSMA)*. Cépaduès, pp. 85–94. URL: http://www.cepadues.com/livres/jfsma-2017-cohesion-fondement-propriete-emergente-9782364936027.html. AR=27%.

Picard, G., Balbo, F., and Boissier, O. (2017). "Approches multiagents pour l'allocation de courses à une flotte de taxis autonomes". In: *25es Journées Francophones sur les Systèmes Multi-Agents (JFSMA)*. Cépaduès, pp. 75–84. URL: http://www.cepadues.com/livres/jfsma-2017-cohesion-fondement-propriete-emergente-9782364936027.html. AR=27%.

Rust, P., Picard, G., and Ramparany, F. (2017b). "Deploiement d'un graphe de facteurs pour l'exécution d'algorithme DCOP dans des environnements ambiants dynamiques". In: *25es Journées Francophones sur les Systèmes Multi-Agents (JFSMA)*. Cépaduès, pp. 95–104. URL: http://www.cepadues.com/livres/jfsma-2017-cohesion-fondement-propriete-emergente-9782364936027.html. AR=48.6%.

— (2016a). "Approche DCOP pour résoudre des problèmes de configuration économe d'environnements intelligents". In: *24es Journées Francophones sur les Systèmes Multi-Agents (JFSMA)*. Cépaduès, pp. 65–74. URL: http://www.cepadues.com/livres/jfsma-2016-systemes-multi-agents-simulation-9782364935594.html. AR=59%.

Cerquides, J., Picard, G., and Rodríguez-Aguilar, J. A. (2015a). "Conception d'une place de marché pour la vente et la distribution d'énergie dans les smart grids". In: *23es Journées Francophones sur les Systèmes Multi-Agents (JFSMA'15)*. Ed. by L. Vercouter and G. Picard. Cépaduès. URL: http://www.cepadues.com/livres/jfsma-2015-systemes-multi-agents-environnements-socio-techniques-9782364931916.html. AR=31%.

Sorici, A., Picard, G., Boissier, O., and Florea, A. (2015b). "Gestionnaire multi-agent de contexte pour les applications d'intelligence ambiante". In: *23es Journées Francophones sur les Systèmes Multi-Agents (JFSMA'15)*. Ed. by L. Vercouter and G. Picard. Cépaduès. URL: http://www.cepadues.com/livres/jfsma-2015-systemes-multi-agents-environnements-socio-techniques-9782364931916.html. AR=62%.

Galland, S., Gaud, N., Rodríguez, S., Balbo, F., Picard, G., and Boissier, O. (2014). "Contextualiser l'interaction entre agents en combinant dimensions sociale et physique au sein de l'environnement". In: *22es Journées Francophones sur les Systèmes Multi-Agents (JFSMA'14)*. Cépaduès. AR=28%.

Picard, G., Villanueva, D., Le Riche, R., and Haftka, R. T. (2013). "Méthode multi-agent d'optimisation par partionnement auto-organisé". In: *21es Journées francophones des systèmes multi-agents (JFSMA'13)*. Cépaduès. AR=33%.

Piette, E., Morge, M., and Picard, G. (2013). "Swing++ : méthode multi-agents pour la résolution du problème des mariages stables". In: *Septièmes journées francophones Modèles Formels de l'Interaction (MFI'13)*.

Villanueva, D., Picard, G., Le Riche, R., and Haftka, R. T. (2012b). "Optimisation multi-agent par partitionnement adaptatif de l'espace de conception". In: *20es Journées francophones des systèmes multi-agents (JFSMA'12)*. Cépaduès, pp. 149–158. AR=50%.

Everaere, P., Morge, M., and Picard, G. (2011). "Casanova : un comportement d'agent pour l'équité des mariages préservant la privacité". In: *19es Journées francophones des systèmes multi-agents (JFSMA'11)*. Cépaduès, pp. 203–212. AR=32.5%.

Persson, C., Picard, G., Ramparany, F., and Boissier, O. (2011c). "Organisation multi-agent pour la gouvernance de systèmes Machine-to-Machine". In: *19es Journées francophones des systèmes multi-agents (JFSMA'11)*. Cépaduès, pp. 11–20. AR=32.5%.

Yaich, R., Jaillon, P., Boissier, O., and Picard, G. (2011a). "Gestion de la confiance et intégration des exigences sociales au sein de communautés virtuelles". In: *19es Journées francophones des systèmes multi-agents (JFSMA'11)*. Cépaduès, pp. 213–222. AR=48.8%.

Kaddoum, E., Gleizes, M.-P., Georgé, J.-P., Glize, P., and Picard, G. (2009a). "Analyse des critères d'évaluation de systèmes multi-agents adaptatifs". In: *Journées Francophones sur les Systèmes Multi-Agents (JFSMA'09), Lyon, France, October 19-21*. Ed. by Z. Guessoum and S. Hassas. Cépaduès, pp. 123–124. AR=23.5%.

Picard, G., Hübner, J. F., Boissier, O., and Gleizes, M.-P. (2009b). "Réorganisation et auto-organisation dans les systèmes multi-agents". In: *Journées Francophones sur les Systèmes Multi-Agents (JFSMA'09), Lyon, France, October 19-21*. Ed. by Z. Guessoum and S. Hassas. Cépaduès, pp. 89–98. AR=39.2%.

Clair, G., Gleizes, M.-P., Kaddoum, E., and Picard, G. (2008a). "Approches multi-agents auto-organisatrices pour un contrôle manufacturier intelligent et adaptatif". In: *Journées Francophones sur les Systèmes Multi-Agents (JFSMA'08), Brest, France, Octobre 15-17*. Cépaduès, pp. 191–200. AR=40.7%.

Picard, G., Gleizes, M.-P., and Glize, P. (2007a). "Affectation distribuée de fréquences par auto-organisation coopérative". In: *Journées Francophones sur les Systèmes Multi-Agents (JFSMA'07), Carcassonne, France, Octobre 17-19*. Cépaduès, pp. 33–42. AR=22.2%.

Picard, G. and Gleizes, M.-P. (2006a). "Auto-organisation coopérative pour la conception de collectifs adaptatifs et robustes". In: *7ème Congrès de la Société Française de Recherche Opérationnelle et d'Aide à la Décision (ROADEF'06), 6, 7 et 8 Février 2006, Lille, France*. Presses Universitaires de Valenciennes, pp. 385–400. AR=58%.

Picard, G. (2005b). "Résolution d'emploi du temps dynamique et distribuée par auto-organisation coopérative". In: *7es Rencontres des Jeunes Chercheurs en Intelligence Artificielle (RJCIA'05), Plate-forme AFIA, Nice*. Presses Universitaires de Grenoble (PUG), pp. 127–140. ISBN: 2-7061-1285-9. AR=55%.

Picard, G. and Glize, P. (2005g). "Modélisation et expérimentations d'une décision locale basée sur l'auto-organisation coopérative". In: *Journées Francophones sur les Systèmes Multi-Agents (JFSMA'05), à Calais du 23 au 25 novembre 2005*. Hermès-Lavoisier, pp. 161–174.