Referências

- AGHA, G.A. **Abstracting Interaction Patterns**: A Programming Paradigm for Open Distributed Systems, In (Eds) E. Najm and J.B. Stefani, Formal Methods for Open Object-based Distributed Systems IFIP Transactions, Chapman & Hall, 1997.
- ALEXANDER, I. **Misuse cases: use cases with hostile intent**. Software, IEEE, 20(1), Jan.-Feb. Page(s):58 66, 2003.
- ALMEIDA, H. O., PERKUSICH, A., FERREIRA, G. V., LOUREIRO, E. C., COSTA, E. B. (2006) **A Component Model to Support Dynamic Unanticipated Software Evolution**. In Proceedings of the International Conference on Software Engineering and Knowledge Engineering (SEKE'06), San Francisco, USA, pp. 262-267, 2006.
- AO, X; MINSKY, N. **Flexible Regulation of Distributed Coalitions**. In Proc. of the 8th European Symposium on Research in Computer Security (ESORICS). Gjøvik Norway, October, 2003.
- ARANGO, G. **Domain Analysis Methods**. In Advances in Software Reuse: Selected Papers from the Second International Workshop on Software Reusability, p.17-49, March 1993, Lucca, Italy. Edited by Ruben Prieto-Diaz and William B. Frakes, IEEE Computer Society Press, 1993.
- ARUNACHALAM, R; SADEH, N; ERIKSSON, J; FINNE, N. AND JANSON, S. The Supply Chain Management Game for the Trading Agent Competition **2004**. CMU-CS-04-107, July 2004.
- AVIZIENIS, A., LAPRIE, J.C, RANDELL, B. Fundamental Concepts of **Dependability**, Research Report N01145, LAAS-CNRS, April 2001.
- AVIZIENIS, A., LAPRIE, J.C, RANDELL, B. **Dependability and its threats A taxonomy**. IFIP Congress Topical Sessions 2004: 91-120, 2004.
- BACHMANN, F; BASS, L. Managing variability in software architectures, presented at Proceedings of the 2001 symposium on Software reusability: putting software reuse in context, Toronto, Ontario, Canada.
- BATORY, D; CARDONE, R; SMARAGDAKIS, Y. **Object-Oriented Frameworks and ProductLines**, 1st Software Product-Line Conference, Denver, Colorado, August 2000.
- BELLIFEMINE, F; POGGI, A; Rimassa, G. **JADE: a FIPA2000 compliant agent development environment**, Proceedings of the Fifth International Conference on Autonomous Agents, ACM Press: Montreal, Quebec, Canada, pp. 216-217, 2001.
- BOOCH, J., RUMBAUGH, I. J. **The Unified Modeling Language User Guide**; Addison Wesley, 1999.

BOWEN, K.A. **Prolog**. Proceedings of the 1979 annual conference, 1979, ISBN 0-89791-008-7, pp 14-23, ACM Press.

CARVALHO, G.R.; PAES, R.; CHOREN, R.; LUCENA, C.J.P.; Towards a Risk Driven Method for Developing Law Enforcement Middleware; International Workshop on Agent-Oriented Methodologies, 3rd, at the Object-Oriented Programming, Systems, Languages & Applications (OOPSLA 2004), Vancouver, British Columbia, Canadá, 24-28 Outubro, 2004.

CARVALHO, G.R.; PAES, R.; CHOREN, R.; ALENCAR, P.; LUCENA, C.J.P.; Increasing Software Infrastructure Dependability through a Law Enforcement Approach, International Symposium on Normative Multiagent Systems (NorMAS2005), 1st, as part of AISB2005. Proceedings of the Symposium on Normative Multiagent Systems, p. 65-72, ISBN 1-90295647-6, 12-13 Abril, 2005a, University of Hertfordshire, Havilland Campus, Hatfield, Inglaterra. Symposium website: http://normas.di.unito.it/zope/aisb05/; AISB 2005 Convention Website: http://aisb2005.feis.herts.ac.uk/.

CARVALHO, G.R.; PAES, R.; LUCENA, C.J.P.; Extensions on Interaction Laws in Open Multi-Agent Systems. First Workshop on Software Engineering for Agent Oriented Systems, Brazilian Symposium on Software Engineering (SEAS – SBES Workshop 2005), pp. 41-50 (CD-ROM). Uberlândia, Brazil, 03-07 Outubro, 2005b.

CARVALHO, G.R.; LUCENA, C.; PAES, R.; BRIOT, J-P.; CHOREN, R.; A Governance Framework Implementation for Supply Chain Management Applications as Open Multi-Agent Systems, Seventh International Workshop on Agent-Oriented Software Engineering (AOSE 2006) at the 5th International Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS 2006), Hakodate, Japan, May 8-12, 2006, ACM (Association for Computing Machinery), Nova Iorque, 1-59593-303-4, p. 85-96, 2006a.

CARVALHO, G.R.; BRANDÃO, A.; PAES, R.; LUCENA, C.J.P; Interaction Laws Verification Using Knowledge-based Reasoning, In: Eight International Bi-Conference Workshop on Agent-Oriented Information Systems (AOIS 2006) at the 5th International Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS 2006), Hakodate, Japan, May 8-12, 2006. Garcia, A. Ghose and M. Kolp (Eds), p. 33-40, ACM (Association for Computing Machinery), Nova Iorque, ISBN 1-59593-303-4, 2006b.

CARVALHO, G.R. **Governance Frameworks**. Doctoral Mentoring. The International Joint Conference on Autonomous Agents and Multi-Agent Systems (AAMAS'2006), 5th, Hakodate, Japan, May 8-12, 2006c.

CARVALHO, G.R.; LUCENA, C.J.P.; PAES, R.; BRIOT, J.P.; **Refinement Operators to Facilitate the Reuse of Interaction Laws in Open Multi-Agent Systems**, International Workshop on Software Engineering for Large-scale Multi-Agent Systems (SELMAS'06), 5th, at ICSE 2006, Shanghai, China. In: Proceedings of the Fifth International Workshop on Software Engineering for Large-scale Multi-agent Systems, p. 75-82, ACM Press, Nova Iorque, ISBN: 1-59593-395-6, May 21-22, 2006d.

CARVALHO, G.R.; ALMEIDA, H.; GATTI, M.; VINICIUS, G.; PAES, R.; PERKUSICH, A.; LUCENA, C.J.P. **Dynamic Law Evolution in Governance Mechanisms for Open Multi-Agent Systems**. Workshop on Software

- Engineering for Agent-oriented Systems (SEAS 2006), 2nd, In: Lucena, C. et al (eds.) Proceedings of the II Workshop on Software Engineering for Agent-oriented Systems (SEAS 2006), pp. 83-94, Florianópolis, Santa Catarina, UFSC, 17 de outubro, 2006e.
- CARVALHO, G.R.; LUCENA, C.; PAES, R.; BRIOT, J-P. CHOREN, R. **Applying the Governance Framework Technique to Promote Maintainability in Open Multi-Agent Systems**. Lecture Notes in Computer Science. Agent-Oriented Software Engineering (AOSE VII), a aparecer em 2007a.
- CARVALHO, G.R.; PAES, R.; LUCENA, C.; CHOREN, R. **Domain Engineering to Ensure Flexibility on Interaction Laws of Multi-Agent Systems**. Journal of the Brazilian Computer Society (JBCS), a aparecer em 2007b.
- CASTELFRANCHI C., DIGNUM F., JONKER C.M., TREUR J. **Deliberative Normative Agents: Principles and Architecture**. Proceedings of the Sixth International Workshop on Agent Theories, Architectures, and Languages (ATAL-99), Orlando, FL, July 15-17, 1999.
- CASTELFRANCHI, C. Dependence Relations in Multi-Agent Systems. In Decentralized AI, Elsevier, 1992.
- CHOPRA, S.; MEINDL, P. Supply Chain Management Strategy, Planning, and Operations. Pearson Prentice Hall, Second Edition, 2004.
- CHOREN, R.; LUCENA, C.J.P. **Modeling Multi-agent systems with ANote**. Software and Systems Modeling 4(2), p. 199-208, 2005.
- COLLINS, J.; ARUNACHALA, R.; SADEH, N.; ERIKSSON, J.; FINNE, N.; JANSON, S. **The Supply Chain Management Game for the 2005 Trading Agent**Competition. CMU-ISRI-04-139. http://www.sics.se/tac/tac05scmspec_v157.pdf, 2004.
- COLLINS, J., ARUNACHALAM, R., SADEH, N., ERIKSSON, J., FINNE, N., JANSON, S. **The Supply Chain Management Game for the 2006 Trading Agent Competition**. Carnegie-Mellon University, Pittsburgh, USA, 2005.
- DAILLE, B. Study and Implementation of Combined Techniques for Automatic Extraction of Terminology. In: Klavans, J., Resnik, P. The Balancing ACT- Combining Symbolic and Statistical Approaches to Language, The MIT Press, 1996. pp. 49-66.
- DIAS, M. A. L. Extração Automática de Palavras-Chave na Língua Portuguesa Aplicada a Dissertações e Teses da Área das Engenharias. Dissertação de Mestrado. Campinas: FEEC-UNICAMP, 2004.
- DIGNUM, F. Agents, markets, institutions, and protocols. In: Agent Mediated Eletronic Commerce, The European AgentLink Perspective., p.98-114. Springer-Verlag, 2001.
- DIGNUM, V. AND DIGNUM, F. **Modeling agent societies: Coordination frameworks and institutions**. In P. Brazdil and A. Jorge (eds.), Progress in Artificial Intelligence, LNAI 2258, Springer-Verlag, pp. 191–204, 2001.
- DIGNUM, V., MEYER, J-J. CH.; WIEGAND, H.; DIGNUM, F. An organisational oriented model for agent societies. In G. Lindemann, D. Moldt,

- M. Paolucci, and B. Yu (eds.), Proceedings of the RASTA Workshop at AAMAS'02, pp. 31–50, 2002.
- EBRAERT, P., VANDEWOUDE, Y., D'HONDT, T., BERBERS, Y. **Pitfalls in Unanticipated Dynamic Software Evolution**. In Proceedings of the Workshop on Reflection, AOP and Meta-Data for Software Evolution (RAM-SE'05), Glasgow, Scotland, pp. 41-50, 2005.
- ESTEVA, M. PhD Thesis, **Electronic Institutions: from specification to development**, Institut d'Investigació en Intel.ligència Artificial, October 2003, Catalonia SPAIN.
- ESTEVA, M., PADGET, J. AND SIERRA, C. Formalizing a language for institutions and norms. In J.-J. Ch. Meyer and M. Tambe (eds.), Intelligent Agents VIII, Vol. 2333 of LNAI, Springer-Verlag, pp. 348–366, 2001.
- FAIRLEY, R. **Risk-based software estimation**. Encyclopedia of Software Engineering. (ed. John J. Marciniak). New York, John Wiley & Sons. Vol 2, 2002, p.1227-1233.
- FAYAD, M; SCHMIDT, D.C.; JOHNSON, R.E. **Building application frameworks: object-oriented foundations of framework design**. ISBN 0471248754, New York: Wiley, 1999.
- FIPA, **FIPA** Contract Net Interaction Protocol Specification, http://www.fipa.org/ specs/ fipa00029/, December, 2002.
- FIRESMITH, D.G. Security Use Cases. Journal Of. Object Technology 2(3), May-June, 2003.
- FONTOURA, M.F.M.C. A Systematic Approach to Framework Development. Ph.D. Thesis, Computer Science Department, Pontifical Catholic University of Rio de Janeiro (PUC-Rio), 1999.
- FONTOURA, M.; PREE, W.; RUMPE, B. The Uml Profile for Framework Architectures. ISBN 0201675188, 240p., Addison-Wesley. 2001
- FREDRIKSSON M. et al. First international workshop on theory and practice of open computational systems. In Proceedings of twelfth international workshop on Enabling technologies: Infrastructure for collaborative enterprises (WETICE), Workshop on Theory and practice of open computational systems (TAPOCS), 2003, pp. 355 358, IEEE Press.
- FREDRIKSSON, M., GUSTAVSSON, R. A methodological perspective on engineering of agent societies. (Eds) A. Omicini and F. Zambonelli and R. Tolksdorf . In Engineering societies in the agents' world, Springer Verlag v. 2203, pp. 10-24, 2002.
- FROEHLICH, G.; HOOVER, H.J.; LIU L.; SORENSON, P.G. **Hooking into Object-Oriented Application Frameworks**, Proc. 19th Int'l Conf. on Software Engineering, Boston, May 1997, 491-501.
- GAMMA, E., JOHNSON, R., HELM, R., VLISSIDES, J., **Design Patterns: Elements of Reusable Object-Oriented Software**. Addison Wesley, 1995.
- GARLAN D.; SHAWN M. **Software Architecture: Perspectives on an Emerging Discipline**, Prentice Hall, April 1996.

- GATTI, M.A.C.; PAES, R.; CARVALHO, G.; RODRIGUES, L.F.; LUCENA, C.J.P.; FACI, N.; BRIOT, J.P.; GUESSOUM, Z.; Governing Agent Interaction in Open Multi-Agent Systems with Fault Tolerant Strategies; International Workshop Agents and Multiagent Systems, from Theory to Application (AMTA'06), Quebec, Canadá, Quebec City: Canadian Society for Computational Studies of Intelligence, 06-08 junho, 2006a.
- GATTI, M.; CARVALHO, G.; PAES, R.; STAA, A.; LUCENA, C.J.P.; BRIOT, J.P.; O Rationale da Fidedignidade em Sistemas Multi-agentes Abertos Governados por Leis. Workshop on Software Engineering for Agent-oriented Systems (SEAS 2006), 2nd, In: Lucena, C. et al (eds.) Proceedings of the II Workshop on Software Engineering for Agent-oriented Systems (SEAS 2006), pp. 1-12, 17 de outubro, 2006b.
- GATTI, M.A.C.; CARVALHO, G.R.; PAES, R.; LUCENA, C.J.P.; BRIOT, J.P. On Fault Tolerance in Law-Governed Multi-Agent Systems. Software Engineering for Large-Scale Multi-Agent Systems. Springer Verlag, LNCS 4408, 2007.
- HADDADI, A. Communication and Cooperation in Agent Systems: A **Pragmatic Theory**, volume 1056 of Lecture Notes in Computer Science. Springer Verlag, 1996.
- HUHNS, M. N., STEPHENS, L. M.; Multi-agent Systems and Societies of Agents. G. Weiss (ed.), Multi-agent Systems, ISBN 0-262-23203-0, MIT press, 1999.
- JACOBSON, I.; GRISS, M.; JONSSON, P. Software Reuse: Architecture, Process and Organization for Business Success. Addison-Wesley, Reading, Massachusetts, June 1997.
- JENNINGS, N. R; WOOLDRIDGE, M. (eds.). Agent technology: foundations, applications and markets. Springer Verlag, 1998.
- JONES, A.J.I.; SERGOT M. On the Characterisation of Law and Computer Systems: The Normative Systems Perspective. In Eds J.-J.Ch. Meyer and R.J. Wieringa, Deontic Logic in Computer Science: Normative System Specification, John Wiley and Sons, chapter 12, pp. 275-307, 1993.
- JOHNSON, R.; BRIAN F. **Designing Reusable Classes**. Journal of Object Oriented Programming, pp.22-35, 1988.
- JOHNSON, R. **Documenting Frameworks Using Patterns**, Proceedings of OOPSLA'92, ACM/SIGPLAN, New York, 1992.
- JOHNSON R. Components, Frameworks Patterns. Symposium of Software Reusability, 1997, USA.
- KANG, K.C.; COHEN, S.G.; HESS, J.A.; NOVAK, W.E.; PETERSON, A.S.. Feature-Oriented Domain Analysis (FODA) Feasibility Study (CMU/SEI-90-TR-21). Pittsburgh, PA,Software Engineering Institute, Carnegie Mellon University, Nov 1993.
- KENDALL, E. Role Modeling for Agent Systems Analysis, Design and Implementation, IEEE Concurrency, 8(2):34-41, April-June 2000.

- KOLLINGBAUM, M. J. AND NORMAN, T. J. **NoA A normative agent architecture**. In Proceedings of the Eighteenth International Joint Conference on Artificial Intelligence, pages 1465-1466, 2003.
- KONING, J.L. AND HUGET, M.P. A component-based approach for modeling interaction protocols. In H. Kangassalo and E. Kawaguchi (eds) 10th European-Japanese Conference on Information Modeling and Knowledge Bases, Frontiers in Artificial Intelligence and Applications. IOS Press, 2000.
- KRASNER, G.E.; POPE, S.T. A Cookbook for Using the Model-View-Controller User Interface Paradigm in Smalltalk-80, Journal of Object-Oriented Programming 1(3), 1988.
- KUWABARA, K; ISHIDA, T; AND OSATO, N. **AgenTalk: Coordination protocol description for multiagent systems**. In First International Conference on MultiAgent Systems (ICMAS-95), San Francisco, June 1995. AAAI Press.
- LEISHMAN, T., VANBUREN, J. The Risk of Not Being Risk Councious: Software Risk Managment Basic, STSC Seminar Series, Hill AFB, UT, 2003.
- MARTÍN, F.J., PLAZA, E., RODRIGUEZ-AGUILAR, J.A. **An Infrastructure for Agent-Based Systems: an Interagent Approach**, International Journal of Intelligent Systems (IJIS, 1999).
- MATHIEU, P., ROUTIER, J. C., AND SECQ, Y. **Dynamic organization of multi-agent systems**. In Proceedings of the First international Joint Conference on Autonomous Agents and Multiagent Systems: Part 1 (Bologna, Italy, July 15 19, 2002). AAMAS'02. ACM Press, New York, NY, 451-452, 2002.
- MENEZES, P.B. Linguagens Formais e Autômatos, Editora Sagra-. Luzzato, 1997.
- MINEAU, G.W. Representing and Enforcing Interaction Protocols in Multi-Agent Systems: an Approach Based on Conceptual Graphs, IEEE/WIC International Conference on Intelligent Agent Technology, 2003.
- MINSKY, N.H., UNGUREANU, V. Law-governed interaction: a coordination and control mechanism for heterogeneous distributed systems. ACM Transactions on Software Engineering Methodology, 9(3):273-305, 2000.
- MUS Manual do Usuário do Sistema Especial de Liquidação e de Custódia (SELIC). Versão 1.0, de 1º de setembro de 2005, Banco Central do Brasil.
- ODELL, J., PARUNAK, H.V.D., FLEISCHER, M., BREUCKNER, S. **Modeling Agents and their Environment**. Agent-Oriented Software Engineering III, Giunchiglia, F., Odell, J., Weiss, G. (eds) Lecture Notes in Computer Science, Vol. 2585. Spriner-Verlag, Berlin Heidelberg New York, 2002.
- OLIVEIRA,T.C.; ALENCAR,P.S.C.; LUCENA, C.J.P.; COWAN, D.D. **RDL: A Language for Framework Instantiation Representation**, Journal of Systems and Software, In Press, Accepted Manuscript, 2007.
- ORENGO, V. M., HUYCK, C. A Stemming Algorithm for Portuguese Language. In: 8th Symposium on String Processing and Information Retrieval (SPIRE 2001), Laguna de San Raphael, Chile, (2001). Proceedings. pp. 186-193.
- PAES, R.B., CARVALHO, G., ALMEIDA, H.O, LUCENA, C., ALENCAR, P.C.S. A conceptual architecture for law-governed open multi-agent systems.

ASSE 2004 - Argentine Symposium on Software Engineering. Córdoba, Argentina. Setembro, 2004.

PAES, R., CARVALHO, G. R., LUCENA, C.J.P., ALENCAR, P. S. C., ALMEIDA, H.O.; AND SILVA, V. T. **Specifying Laws in Open Multi-Agent Systems**. In: Agents, Norms and Institutions for Regulated Multi-agent Systems (ANIREM), AAMAS'2005.

PAES, R.; CARVALHO, G.R.; GATTI, M.; LUCENA, C.J.P.; BRIOT, J.P.; CHOREN, R. Enhancing the Environment with a Law-Governed Service for Monitoring and Enforcing Behavior in Open Multi-Agent Systems. In: Weyns, D.; Parunak, H.V.D.; Michel, F. (eds.): Environments for Multi-Agent Systems, Lecture Notes in Artificial Intelligence, vol. 4389. Berlim: Springer-Verlag, 2007, p. 221–238.

PARNAS, D. L. **On the design and development of program families**. IEEE Transactions on Software Engineering, 2(1):1-9, March 1976.

PREE, W. **Design Patterns for Object-Oriented Software Development**, Addison-Wesley Publishing Company, 1995.

PREE, W. Essential Framework Design Patterns. Object Magazine 1997

PRESTES, R.; CARVALHO, G.R.; PAES, R.; LUCENA, C.J.P.; ENDLER, M.; **Applying Ontologies in Open Mobile Systems**; Building Software for Pervasive Computing, The Object-Oriented Programming, Systems, Languages & Applications (OOPSLA 2004), Vancouver, British Columbia, Canadá, 24-28 Outubro, 2004.

PRIETO-DIAZ,R.; SCHAFER, W.; MATSUMOTO, M. (eds.) **Software Reusability**. Ellis Horwood, New York, 1994.

RODRIGUES, L.F.; CARVALHO, G.R.; PAES, R.; LUCENA, C.J.P. **Towards an Integration Test Architecture for Open MAS**. First Workshop on Software Engineering for Agent Oriented Systems, Brazilian Symposium on Software Engineering (SEAS – SBES Workshop 2005), pp. 60-66 (CD-ROM). Uberlândia, Brazil, 03-07 Outubro, 2005 (http://www.les.inf.pucrio.br/seas2005/file/lRodrigues.pdf).

RODRIGUEZ-AGUILAR, J.A. On the Design and Construction of Agent-mediated Electronic Institutions. PhD Thesis. Institut d'Investigació en Intel.ligència Artificial. 2001, Catalonia - SPAIN.

SADEH, N. R. ARUNACHALAM, J. ERIKSSON, N. FINNE AND S. JANSON. **TAC-03:** a supply-chain trading competition, AI Mag. 24 (1) 92–94, 2003.

SCHUMACHER, M., OSSOWSKI, S.; The Governing Environment (2005)

SINGH, M. P., A Customizable Coordination Service for Autonomous Agents, Intelligent Agents IV: Agent Theories, Architectures, and Languages, Munindar P. Singh et al. ed., Springer, Berlin, 1998, pp. 93-106.

SMITH, R.G. The Contract Net Protocol: High-Level Communication and Control in a Distributed Problem Solver. IEEE Trans. Computers, 29(12):1104–1113,1980.

SOMMERVILLE, I. **Software Engineering**. 7.ed. New York: Addison-Wesley, 2004. 759p.

STAA, A V. **Programação Modular**: Desenvolvendo programas complexos de forma organizada e segura. Rio de Janeiro: Editora Campus, 2000. 690p.

SYCARA, K., GIAMPAPA, J.A., LANGLEY, B.K., PAOLUCCI, M. **The RETSINA MAS, a Case Study**, In (Eds) A. Garcia and et al; Software Engineering for Large-Scale Multi-Agent Systems: Research Issues and Practical Applications. Springer-Verlag, v. 2603, pp. 232-250, 2003.

VAZQUEZ-SALCEDA, J., DIGNUN, V., DIGNUN, F. **Organizing Multiagent Systems**, Autonomous Agentes and Multi-Agent Systems, 11, 307-360, 2005.

WEINSTOCK, C.B; GOODENOUGH, J.B.; HUDAK, J.J. **Dependability Cases**. CMU/SEI-2004-TN-016, Proc. of The International Conference on Dependable Systems and Networks, 2004.

WOOLDRIDGE, M; WEISS, G; CIANCARINI, P. (Eds.) **Agent-Oriented Software Engineering II**, Second International Workshop, AOSE 2001, Montreal, Canada, May 29, 2001, Revised Papers and Invited Contributions, Vol. 2222 of Lecture Notes in Computer Science, Springer, 2002.

YU, L; SCHMID, B.F. A conceptual framework for agent-oriented and role-based workflow modelling, the 1st International Workshop on Agent-Oriented Information Systems, Heidelberg, 1999.

ZAMBONELLI, F., JENNINGS, N. AND WOOLDRIDGE, M. Organisational abstractions for the analysis and design of multi-agent systems. In P. Ciancarini and M. Wooldridge (eds.), Agent-Oriented Software Engineering, LNCS 1957, Springer-Verlag, pp. 98–114, 2001.

ZAMBONELLI, F. Abstractions and infrastructures for the design and development of mobile agent organizations. in M. Wooldridge, G. Weiss, and P. Ciancarini (eds.), Agent-Oriented Software Engineering II, LNCS 2222, Springer-Verlag, pp. 245–262, 2002.

ZAMBONELLI, F.; JENNINGS, N.; WOOLDRIDGE, M. **Developing multiagent systems: The gaia methodology**, ACM Trans. Softw. Eng. Methodol. 12 (3) 317–370, 2003.