Giancarlo F. Ruffo, Ph.D.

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Principal investigator ARC^2S Group arcs.di.unito.it

Personal Data

Date of birth November 27th, 1971

Place of birth Catania, Italy

Citizenship Italy Permanent residence Italy

Academic History

Ph.D. Informatica (Computer Science)

University of Turin, Italy. Feb. 25th, 2000

Laurea (Doctor) Scienze dell'Informazione (Computer Science) cum laude

University of Catania, Italy, July 22nd, 1995

Professional History

2013 Start-up company co-founder

NetAtlas s.r.l.

2011-present Adjunct Professor, School of Informatics and Computing

Indiana University

2010/11 Visiting Professor, CNetS (Center for Complex Networks and Systems Research)

Indiana University, (sabbatical semester)

2006-present Associate Professor of Computer Science, University of Turin

(italian discipline code: INF/01)

2004 Visiting Scholar, New York University

2000/06 Assistant Professor of Computer Science, University of Turin

1999/00 ICT consultant, freelancer 1995 Intern, Twente University, NL

Research Interests

I am particulary attracted by scientific challenges that span from theoretical modeling to applicative exploitations of the findings in real world scenarios. Working with many collaborators, peers, as well as younger researchers under my supervision, is my primary call. I have partecipated to large and complex projects, discussing with scientists active in many different disciplines, such as physics, sociology, philosophy, communication science. I believe that multidisciplinarity and interdisciplinary collaborations are fundamental assets for ground breaking societal innovations.

During the earliest years of my scientific career, I have been involved in research projects focused to strictly related computer science problems, such as: computer and network security, distributed applications, peer-to-peer systems, micro-payment systems, proactive password checking, anomaly detection, machine learning, inductive logic programming, web and data mining, recommendation systems.

As data availability and the importance of data-driven knownledge have emerged powerfully also in other areas other than computer science, the potential implications of my most relevant contributions in the last decade, however, have moved also to some area other than computer science. Many new promising fields were introduced to better gather all the useful multidisciplinary efforts, and today I am comfortable with the following categories that best fit with my research topics: 'em computational social science, complex networks, network science, network analysis, data science, social media analysis.

Science is likely built over a series of intellectual obsessions. My most recent one is misinformation spreading and polarization in on line communities.

Grants and Financially Supported Projects

	per combattere l'intolleranza"
	(partecipant) Funded by Ministero del Lavoro e delle Politiche Sociali
	(Avviso n. 1/2017 per il finanziamento di iniziative e progetti di rilevanza nazionale
	ai sensi dell'art. 72 del decreto legislativo 3 luglio 2017, n.117).
ongoing	"IhatePrejudice: Immigrants, Hate and Prejudice in Social Media"
011001110	(partecipant) Funded by Compagnia di SanPaolo, 2017-2019 77 K€
	hatespeech.di.unito.it/ihateprejudice.html
ongoing	"Hate Speech & Social Media"
ongoing	(partecipant) Funded by Fondazione CRT. 2016-2018 30 K €
	hatespeech.di.unito.it/crt.html
2016/18	"Innovation in Advanced Analytics: analysis of banking transactions networks"
2010/10	(PI) Funded by Innovation Center, Intesa Sanpaolo, 180 K€
2015/19	
2015/18	"Toreador: TrustwOrthy model-awaRE Analytics Data platfORm"
	(partecipant) Funded by EC-RIA, H2020, ICT-2015-16
0019/14	Partecipated as member of CINI (2015, 36 months), www.toreador-project.eu
2013/14	"Visualization tools for complex information and heterogeneous data analysis"
0011/10	(PI) Funded by Telecom Italia Lab', 75 K €
2011/12	"INCA"
	(Co-PI), Co-funded by Finpiemonte, "Progetto Polo della Creatività"), 45 K€
2010/11	Project total cost: 1500 K€
2010/11	"IS4-MOBI"
	(PI), Co-funded by Finpiemonte ("Progetto Polo ICT") 76 K€
2010/11	Project total cost: 860 K€
2010/11	"SALC - Services à la Carte"
	(PI), Co-funded by Finpiemonte ("Progetto Polo ICT"), 58 K€
2040/44	Project total cost: 259 K€
2010/11	"SIPLab - Social Information Processing"
	(Co-PI) Funded by CSP Sca.r.l.), 45 K€
2010	"ASVD - Ad-Supported Video Distribution"
	(PI) Co-funded by Finpiemonte, as subcontractor of SINAPSI, 45 K€
	Project total cost: 500 K€
2008/09	"Recommendation & Discovery for PVR"
	(PI) Funded by Torino Wireless, "Bando Omega Box", 90 K€
2002/00	Project total cost: 250 K€
2003/06	"DIADI2000 - PROGETTO 2003-2006"
	(partecipant) Funded by Regione Piemonte, subcontractor of CSP
2002/03	"WTLAB", (partecipant) Funded by CSP
2002/05	"WebMinds", (partecipant) Co-funded by MIUR (FIRB)
2001/02	"Computer and Network Security", (partecipant) Funded by CNR
2000/01	"Computer Security", (partecipant) Funded by CNR
2000	University of Turin "Giovani Ricercatori" Grant, (personal grant)
1999	University of Turin "Giovani Ricercatori" Grant, (personal grant)
1996/98	"ILP2 (Inductive Logic Programming II)"
	(partecipant) Co-funded by EC, (EU Esprit Project n. 20237).
1997	"Security and Network Management"
	(partecipant), Funded by ASI, Italian Space Agency.

"Contro l'odio: tecnologie informatiche, percorsi formativi e storytelling partecipativo

ongoing

Awards and Honors

- 2015 ISI fellow 2015 (http://www.isi.it/knowledge-exchange/fellowships/)
- 2012 Best Dataset Award at ICWSM 2012 for paper [D.30]
- 2011 Nomination as Adjunct Professor at Indiana University
- 2010 ACM Recognition of Service Award

Advising and research supervision

Ph.D. chaired

Rossano Schifanella (A Legal and Efficient Peer-to-Peer Market Place: Exploiting Fairness and Social Relationships, 2003-07); currently Assistant Professor at University of Turin

Marco Milanesio (Layering Multi-Purpose Applications over Structured and Dependable P2P Systems, 2006-10); currently Research Engineer at Eurecom, France

Luca Aiello (Analysis, prediction and privacy-aware design of social media and online search, 2008-11); currently Senior Scientist at Bell Labs, London, UK

André Panisson (Selective Information Dissemination for Mobile Computing, 2008-11); currently Data Scientist at ISI, Turin, Italy

Martina Deplano (The Role of User Experience and Gamification in Computational Social Science, 2010-15); currently Greenpeace activist.

Emilio Sulis, financially supported by Fondazione Lagrange. (Social Sensing and Social Indicators, 2011-16);

Marcella Tambuscio (Role of fact-checking activity and underlying network structure in misinformation spreading, 2014-17)

Mirko Lai (Language and structure in polarized communities, 2014-18)

Edoardo Galimberti (2017-present)

Alfonso Semeraro (2018-present)

Salvatore Vilella (2018-present)

Alessandra Urbinati (2019-present)

Research Assistants

Alessandro Basso (2008-2010) currently Security Analyst at Wachovia, Charlotte, NC, USA.

Marco Milanesio (2010-2011) currently Research Engineer, Eurecom, France.

Salvatore Spoto (2011) currently free lancer senior developer and consultant.

Gianluca Tursi (2013) currently Software Architect, Nembol s.r.l..

Mirko Lai (2014) currently post-doc, University of Turin.

Alfonso Semeraro (2016-2018) currently Ph.D. Student, University of Turin.

Arthur Capozzi (2017-present) currently short term researcher, Master dei Talenti.

Flavio Lisdero (2018) currently Data Scientist, private company

Alessandra Urbinati (2018) currently short term researcher, ISI Foundation.

Salvatore Vilella (2018) currently short term researcher, ISI Foundation.

Visiting Professors and Scholars

André Panisson, visiting scholar, Universidade Federal do Rio Grande do Sul (2007-08)

Prof. Johan Bollen, visiting professor, Indiana University (2017)

Prof. Leo Ferres, visiting professor, Universidad de Desarrollo (2017)

Dr. Bruno Goncalves, visiting scholar, New York University (2017)

Prof. Alessandro Flammini, visiting professor, Indiana University (2017, 2018, 2019)

Maeva Siga, internship, University of Grenoble (2019)

Romain Boulet, visiting professor, Université Jean Moulin (expected: 2020)

Publications

A. Books

- [A.4] AA.VV.: Manuale di Informatica Giuridica e diritto alle nuove tecnologie. A cura di: U. Pagallo e M. Durante. UTET 2012.
- [A.3] F. Menczer, C. Cattuto, and **G. Ruffo** (editors): *HT 2009, Proceedings* of the 20th International Conference on Hypertext and Hypermedia. ACM, 2009.
- [A.2] L. Benussi, C. Blengino, A. Glorioso, G. Ramello, **G. Ruffo** and M. Travostino: *Copyright digitale*, Giappichelli, Torino 2009.
- [A.1] F. Bergadano, A. Mantelero, G. Ruffo, and G. Sartor: Digital Privacy. Giuristi e informatici a confronto, Giappichelli, Torino 2006.

C. Journals and book chapters

- [C.18] M. Tambuscio, D. F. M. Oliveira, G. L. Ciampaglia, G. Ruffo, Network segregation in a model of misinformation and fact checking. in Journal of Computational Social Science 1 (2), 261-275
- [C.17] A. Rapp, A. Marcengo, L. Buriano, G. Ruffo, M. Lai, F. Cena, Designing a personal informatics system for users without experience in self-tracking: a case study, in Behaviour & Information Technology 37 (4), 335-366
- [C.16] E Sulis, D.H Faras, P Rosso, V Patti, G Ruffo, Figurative messages and affect in Twitter: Differences between #irony, #sarcasm and #not, in Knowledge-Based Systems 108, 132-143
- [C.15] M. Deplano and G. Ruffo, GWAP as a tool to analyze, design, and test geo-social systems, in Intelligent Multimedia Technologies for Networking Applications: Techniques and Tools, D. Kanellopoulos, Ed. IGI Global, ch. 16, pp. 380407, (2013)
- [C.14] L. M. Aiello, A. Barrat, C. Cattuto, R. Schifanella, G. Ruffo, Link creation and information spreading over social and communication ties in an interest-based online social network, in EPJ Data Science 2012, 1:12 (2012)
- [C.13] A. Barrat, C. Cattuto, A. Panisson, **G. Ruffo**, and R. Schifanella: On Human Proximity Dynamics for Data Diffusion through Ad-Hoc Networks, in in Ad Hoc Networks Journal, Elsevier 10(8):15321543 (2012)
- [C.12] L. Aiello, and G. Ruffo: LotusNet: tunable privacy for distributed online social network services, in Peer-to-Peer Networking and Applications, Springer (accepted for publication). On line version: http: //dx.doi.org/10.1016/j.comcom.2010.12.006

- [C.11] L. Aiello, M. Milanesio, **G. Ruffo**, and R. Schifanella: *An identity-based approach to secure P2P applications with Likir*, in Computer Communications, Elsevier (accepted for publication). On line version: http://www.springerlink.com/content/23535n21w23hw666/
- [C.10] S. Lian, D. Kanellopoulos and G. Ruffo: Recent Advances in Multimedia Information System Security, in Informatica Journal of Computing and Informatics (Special Issue in Multimedia Information System Security) 33(1): 3-24 (2009), ISSN 0350-5596
- [C.9] A. Glorioso, U. Pagallo and G. Ruffo: The Social Impact of P2P Systems, in Handbook of Peer-to-Peer Networking, Shen, X; Yu H.; Buford, J.; Akon, M. (Eds.) 2010 ISBN: 978-0-387-09750-3. Springer. 2009.
- [C.8] G. Ruffo e R. Schifanella: A Peer-to-Peer Recommender System Based on Spontaneous Affinities, in ACM Trans. Internet Technol. 9, 1 (Feb. 2009), 1-34.
- [C.7] G. Ruffo e R. Schifanella: FairPeers: Efficient Profit Sharing in Fair Peer-to-Peer Market Places, in Journal of Network and Systems Management (Special Issue on Peer-to-Peer Technologies in Network and Service Management), 15(3): 355-382 (2007), Springer.
- [C.6] G. Ruffo, R. Schifanella, G. Ballocca, R. Politi: Integrated Techniques and Tools for Web Mining, User Profiling and Benchmarking analysis, in "Web Mining: an Overview", October, 2006. ICFAI University Press. ISBN: 81-314-0420-X.
- [C.5] F. Bergadano, A. Giallombardo, A. Puliafito, G. Ruffo, S. Riccobene, L. Vita: Java-based and Secure Learning Agents for Information Retrieval in Distributed Systems, "Information Sciences", num. 113, 1999, North Holland. pp. 55-84.
- [C.4] F. Bergadano, B. Crispo. **G. Ruffo**: *High dictionary compression with proactive password checking*, in ACM Trans. on Information and System Security (TISSEC). 1, 1 (November 1998), 3-25, ACM.
- [C.3] F. Bergadano, A. Giallombardo, A. Puliafito, G. Ruffo, L. Vita: Security Agents for Information Retrieval in Distributed Systems, in "Parallel Computing", num. 22(13) 1997, North Holland. pp. 1719-1731.
- [C.2] F. Bergadano, D.Gunetti, M. Nicosia e G. Ruffo: Towards the Learnability of Prolog Programs, in G.Tascini, F.Esposito, U.Roberto, P.Zingaretti editors, "Machine Learning and Perception", Series in Machine Perception and Artificial Intelligence, vol. 23, World Scientific Publishing Co Pte Ltd, 1996. pp. 180-187.
- [C.1] F. Bergadano, D.Gunetti, M. Nicosia and G. Ruffo: Learning Logic Programs with Negation as Failure, in L. De Raedt, editor, "Advances in Inductive Logic Programming", IOS Press, 1996. pp. 107-123.

D. Peer reviewed **conferences** and **workshops**

- [D.39] A. Capozzi, G. Ruffo, V. Patti, C. Bosco (2018) A Data Viz Platform as a Support to Study, Analyze and Understand the Hate Speech Phenomenon. In Proceedings of Web Studies 2. October 35, 2018, Paris, France, ACM Digital Library.
- [D.38] M. Lai, V. Patti, G. Ruffo and P. Rosso. Stance Evolution and Twitter Interactions in an Italian Political Debate. Proc. of 23rd International Conference on Natural Language & Information Systems, 2018.
- [D.37] M. Lai, M. Tambuscio, V. Patti, G. Ruffo, P. Rosso, Extracting Graph Topological Information and Users Opinion, in Proc. of Intern. Conf. of the Cross-Language Evaluation Forum for European Languages, Springer, 2017
- [D.36] C. Bosco, V. Patti, M. Bogetti, M. Conoscenti, G. Ruffo, R. Schifanella, Marco Stranisci, Tools and resources for detecting hate and prejudice against immigrants in social media, in Proc. of Symposium III. Social Interactions in Complex Intelligent Systems (SICIS) at AISB 2017
- D.35] D.I.H. Faras, E. Sulis, V. Patti, G. Ruffo, C. Bosco, Valento: Sentiment analysis of figurative language tweets with irony and sarcasm, in Proc. of the 9th International Workshop on Semantic Evaluation (SemEval 2015)
- [D.34] M. Tambuscio, G. Ruffo, A. Flammini, and F. Menczer, Fact-checking Effect on Viral Hoaxes: A Model of Misinformation Spread in Social Networks. In Proc. of the 24th International Conference on World Wide Web Companion (WWW '15 Companion), 2015
- [D.33] C. Bosco, L. Allisio, V. Mussa, V. Patti, G. Ruffo, M. Sanguinetti, E. Sulis, Detecting Happiness in Italian Tweets: Towards an Evaluation Dataset for Sentiment Analysis in Felicitt, in Proc. of the 5th Intern. Workshop on Emotion, Social Signals, Sentiment & Linked Open Data, ES³LOD 2014, 2014
- [D.32] M. Sanguinetti, E, Sulis, V. Patti, G. Ruffo, L. Allisio, V. Mussa, C. Bosco, Developing corpora and tools for sentiment analysis: the experience of the University of Turin group, in Proc. of the 1st Italian Conference on Computational Linguistics CLiC-it 2014, 2014
- [D.31] L. Allisio, V. Mussa, C. Bosco, V. Patti, G. Ruffo, Felicittà: Visualizing and Estimating Happiness in Italian Cities from Geotagged Tweets, in ESSEM@AI*IA 2013: 95-106
- [D.30] L. M. Aiello, M. Deplano, R. Schifanella, G. Ruffo, People are Strange when youre a Stranger: Impact and Influence of Bots on Social Networks, in Proc. of the 6th Intern. AAAI Conf. on Weblogs and Social Media (ICWSM12), Dublin, Ireland, 2012 [AR: 20%] [Best Dataset Award]

- [D.29] R. Schifanella, L. M. Aiello, G. Ruffo, Tagging relations to achieve complex search goals, in NweSP11: Proc. of the 7th International Conference on Next Generation Web Services Practices, Salamanca, SP, 2011
- [D.28] A. Basso, M. Milanesio, A. Panisson, G. Ruffo: On Collaborative Filtering Techniques for Live TV and Radio Discovery and Recommendation In EC-Web 2011: Proc. of the 12th International Conference on Electronic Commerce and Web Technologies, Toulouse, France, August 29 -September 2, 2011. LNBIP Series, Springer, 2011 (accepted for pubblication)
- [D.27] L. M. Aiello, A. Barrat, C. Cattuto, G. Ruffo, R. Schifanella: Link creation and profile alignment in the aNobii social network In SocialCom'10: Proc. of the 2nd IEEE International Conference on Social Computing, Minneapolis, MN, USA, 2010 [Acceptance Rate: 13%]
- [D.26] L. M Aiello, and G. Ruffo: Secure and Flexible Framework for Decentralized Social Network Services In Proc. of the Security and Social Networking Workshop, (SESOC 2010), Mannheim, Germany, 29 Mar 2010, IEEE Computer Society. [Acceptance Rate: 33%]
- [D.25] L. M Aiello, M. Milanesio, G. Ruffo, and R. Schifanella: Tagging with DHARMA In Proc. of the Seventh International Workshop on Hot Topics in Peer-to-Peer Systems (HOT-P2P 2010), April, 2010, Atlanta (USA). IEEE Computer Society digital library [Acceptance Rate: 43%]
- [D.24] A. Basso, M. Milanesio and G. Ruffo: Events discovery for personal video recorders, in Proc. of the Seventh European Conference on European interactive Television Conference (Leuven, Belgium, June 03 - 05, 2009). EuroITV '09. ACM, New York, NY, 171-174
- [D.23] R. Schifanella, A. Panisson, C. Gena and G. Ruffo: MobHinter: Epidemic Collaborative Filtering and Self-Organization in Mobile Ad-Hoc Networks, in the 2nd ACM Intern. Conf. on Recommender Systems 2008 (RecSys 2008), October 23-25, 2008, Lausanne, Switzerland. ACM Press. pp. 27-34 [Acceptance Rate (long paper): 16.1%].
- [D.22] L. M. Aiello, M. Milanesio, G. Ruffo e R. Schifanella: Tempering Kademlia with a Robust Identity Based System, In Proc. of the 8th International Conference on Peer-to-Peer Computing 2008 (P2P'08), September 8-11, 2008, RWTH Aachen University, Germany. IEEE Press. (pp. 30-39) [Acceptance Rate: 20.8%]
- [D.21] A. Panisson, G. Ruffo and R. Schifanella: X-Hinter: a Framework for Implementing Social Oriented Recommender Systems, In Proc. of the 21th ACM Conference on Hypertext and Hypermedia (Hypertext 2008), June 19-21, 2008, Pittsburgh, Pennsylvania, USA. ACM Press

- [D.20] M. Milanesio and G. Ruffo: Iterative Key Based Routing for Web Services Addressing and Discovery, in Inter-Domain Management, Proc. of First International Conference on Autonomous Infrastructure, Management and Security, AIMS 2007, Oslo, Norway, June 21-22, 2007, LNCS 4543 Springer.
- [D.19] U. Pagallo and G. Ruffo: P2P Systems in Legal Networks: Another "Small World" Case, In Proc. of 11th Intern. Conf. on Artificial Intelligence and Law, ICAIL 2007, Stanford, CA (USA). June 2007, ACM Press.
- [D.18] **G. Ruffo** and R. Schifanella: Evaluating Peer-to-Peer Recommender Systems that Exploit Spontaneous Affinities., In Proc. of 22nd Annual ACM Symposium on Applied Computing, Seoul, South Korea. March, 2007, ACM. [Acceptance Rate: < 30%].
- [D.17] M. Milanesio, G. Ruffo, F. Ricchiuti, and D. Albertin: Accessing and Distributing Streaming Events on DHT-based Systems, in Proc. of 2nd Inter. Conf. on Automated Production of Cross Media Content for Multichannel Distribution (AXMEDIS'06), Leeds (UK), December 12-15, IEEE Press, 2006.
- [D.16] G. Ruffo, R. Schifanella and E. Ghiringhello: A Decentralized Recommendation System based on Self-Organizing Partnerships, IFIP-Networking'06, May 2006, Coimbra (Portugal) LNCS 3976, pp. 618-629, Springer-Verlag, 2006. [Acceptance Rate: 20.0%]
- [D.15] M. Milanesio and G. Ruffo: Publishing, Retrieving and Streaming Lectures via Application Level Multicast, in Intern. Conference on Internet and Web Applications and Services 2006, (ICIW'06), Guadaloupe (Fr), Febraury 2006. IEEE Press.
- [D.14] D. Catalano, G. Ruffo and R. Schifanella: A P2P Market Place Based on Aggregate Signatures, 3rd Int. Symposium on Parallel and Distributed Processing and Applications (ISPA 05), 2005 Int. Workshop on Applications and Economics of Peer to Peer Systems, November, Nanjing, P. R. China, in G. Chen et al. (Eds.): ISPA Workshops 2005, LNCS 3759, pp. 54-63, Springer-Verlag, 2005. [Acceptance Rate: 22.2%]
- [D.13] D. Gunetti, C. Picardi and G. Ruffo: Dealing with Different Languages and Old Profiles in Keystroke Analysis of Free Text, in S. Bandini, editor, Proc. of the Nineth Congress of the Italian Association for Artificial Intelligence (AI*IA-2005), Milan, Italy. LNCS 3673, pages 347-358. Springer-Verlag, 2005.
- [D.12] D. Gunetti, C. Picardi and G. Ruffo: Keystroke Analysis of Different Languages: a Case Study, in Proc. of the 2005 Intern. Conference on Intelligent Data Analysis (IDA 2005), September 8-10, 2005, Madrid, Spain. LNCS 3646, Springer Verlag, pp. 133–144. [Acceptance Rate: 25.0%].

- [D.11] G. Ruffo and R. Schifanella: Scalability Evaluation of a Peer-to-Peer Market Place based on Micro-Payments, in Proc. of the 2005 International Workshop on Hot Topics in Peer-to-Peer Systems (HOT-P2P 2005), July 21th, 2005, San Diego, CA, USA. IEEE Press.
- [D.10] F. Bergadano and G. Ruffo: EnFilter: a Password Enforcement and Filter Tool based on Pattern Recognition Techniques, in Proc. of the 2005
 International Conference on Image Analysis and Processing (ICIAP 2005)
 Special Session in "Pattern Recognition in Computer Security", September 6-8, 2005, Cagliari, Italy. LNCS 3617, Springer Verlag, pp.75–82.
- [D.9] D. Catalano and G. Ruffo: A Fair Micro-Payment Scheme for Profit Sharing in a P2P Network, in Proc. of the 2004 International Workshop on Hot Topics in Peer-to-Peer Systems (HOT-P2P 2004), October 8th, 2004. Volendam, The Netherlands. IEEE Press.
- [D.8] G. Ruffo, R. Schifanella, M. Sereno and R. Politi: WALTy: A User Behavior Tailored Tool for Evaluating Web Application Performance, in Proc. of the 3rd IEEE International Symposium on Network Computing and Applications (IEEE NCA04)), August 30th - September 1st, 2004, Cambridge, MA, USA. IEEE Press.
- [D.7] G. Ruffo, R. Schifanella, M. Sereno and R. Politi: WALTy: a Web User Tailored Tool for Evaluating Web Application Performance, in Proc. of QEST'04, Enschede (NL), September 2004; IEEE Press.
- [D.6] G. Ruffo: Legal File and Profit Sharing in a Peer to Peer Network, in Security and Management Conference, Las Vegas, June 21-24 2004; CSREA Press. ISBN: 1-932415-37-8.
- [D.5] G. Ballocca, R. Politi, G. Ruffo and V. Russo: Benchmarking a Site with Realistic Workload, in 2002 IEEE Workshop on Workload Characterization (WWC), November 2002, Austin (Texas).
- [D.4] B.Crispo and G. Ruffo: Reasoning about Accountability within Delegation, in Proc. of the Third International Conference on Information and Communication Security, LNCS 2229, Springer Verlag. November 2001, Xi'an (China).
- [D.3] D. Gunetti and G. Ruffo: Intrusion Detection through Behavioral Data, in Proc. of the third symposium on Intelligent Data Analysis (IDA'99), LNCS 1642, pp. 383-394, Springer Verlag. August, 1999, Amsterdam (Nl).
- [D.2] F. Bergadano, G. Ruffo and B. Crispo: Proactive Password Checking with Decision Trees, in Proc. of CCCS 1997, ACM Conference on Computer and Communication Security, April 1997, Zurich, Switzerland - ACM Press, pp. 67-76.

[D.1] F. Bergadano, A. Puliafito, S. Riccobene, G. Ruffo and L. Vita: Intelligent Agents: a Tool for Managing and Retrieving Information in Distributed Systems, in Proc. of ICCCN'96 - Fifth International Conference on Computer Communictions and Networks, Ottobre 1996, Rockville, Maryland, USA - IEEE Computer Society Press, pp. 271-272

E. Theses

- [E.2] G. Ruffo: Learning Single and Multiple Instance Decision Trees for Computer Security Applications, Ph.D. Dissertation, Computer Science Department, University of Turin, 2000
- [E.1] G. Ruffo: Applicazione della Programmazione Logica Induttiva allo Sviluppo Semi-Automatico del Software, Tesi di Laurea, Mathematics and Computer Science Department, University of Catania, 1995

F. Other papers, projects deliverables and publications

- [F.10] A. Basso, M. Milanesio, A. Panisson, G.Ruffo: From Recordings to Recommendations: Suggesting Live Events in the DVR Context In PRSAT 2010: Proc. of the Intern. Workshop on the Practical Use of Recommender Systems, Algorithms and Technologies, 30 Sept. 2010, Barcelona, Spain.
- [F.9] U. Pagallo and G. Ruffo: On The Growth Of Collaborative And Competitive Networks: Opportunities and New Challenges, in Proc. of ETHICOMP Working Conference 2007, Kunming, China. April 2007.
- [F.8] M. Milanesio and G. Ruffo: Super Peer in a Chord ring to enforce security, Tech. Report n.83/05, Università degli Studi di Torino
- [F.7] D. Catalano and G. Ruffo: A peer-to-peer micropayment scheme protecting intellectual rights, Tech. Report 80/04, Università degli Studi di Torino
- [F.6] G. Ballocca and G. Ruffo: Web User Behavior Characterization: Techniques, Applications and Research Directions, Intelligent Systems'02, 16 October 2002 Institut Jozef Stefan, Ljubljana, Slovenija. ISBN: 961-6303-41-4
- [F.5] F. Bergadano and G. Ruffo: Efficient Multiple Instance Learning, Project No: 20.237 (ILP 2), anno III, Deliverable No.: TO1c
- [F.4] F. Bergadano, D. Gunetti and **G. Ruffo**: Solving Complex Software Engineering problems with Tracy-not, Project No: 20.237 (ILP 2), anno III, Deliverable No.: TO2
- [G.3] F. Bergadano and G. Ruffo: Preliminary report on the ReliC learning system, Project No: 20.237 (ILP 2), anno II, Unplanned

- [G.2] F. Bergadano, D. Gunetti, F. Neri and **G. Ruffo**: *ILP data analysis in adaptive system and network management*, Project No : 20.237 (ILP 2), anno II, Deliverable No.: TO1b
- [G.1] F. Bergadano, A. Giordana, D. Gunetti, F. Neri and G. Ruffo: Information Retrieval in distributed open systems, Project No: 20.237 (ILP 2), anno I, Deliverable No.: TO1a

Software and Multimedia products

- Felicittà (2013-present): Visualization tool for estimating happiness in italian cities by means of geotagged tweets
- **DeHinter** (2007-2008): a Gnutella "Limewire" plug in embedding a decentrilized recommendation engine. dehinter.di.unito.it
- FairPeers (2005-2006): a micropayment tool tailored for p2p file sharing systems.
- EnFilter (2003-2004): ProCheck porting for Windows operating systems
- WALTy (a.k.a. CBMGBuilder; 2002 2004): Web sites monitoring and testing tool.
- **Dip digital penguin** (2003): 15 minutes video clip introducing computer science fundamentals for educational purposes. dipdigital.di.unito.it
- Relic (1999-2000): data mining systems based on decision trees learning tailored for multiple instance items descriptions.
- **ProCheck** (1998): Proactive password checking tool for Unix operating systems.

Teaching

MD courses (U. of Turin) Complex Networks (2011-present)

Advanced Computer and Network Security (2007-2013)

BD courses (U. of Turin) Web Technologies (2011-present)

iPhone Application Development (2010/11), Indiana University

Networks and Distributed Systems (2006-2010)

Fundamentals of Cryptography and Network Security (2004-2010)

Fundamentals of Computer Science (2000-2007)

Fundamentals of Java Programming (2000-2005)