PERSONAL INFORMATION

Roberto Tonelli

[All CV headings are optional. Remove any empty headings.]

Via delle Tortore 1, 09126 Cagliari Italy

**** = +39 0706756684

roberto.tonelli@dsf.unica.it

http://www.dsf.unica.it/~roberto

Sex M | Date of birth 02/02/1968 | Nationality Italian

POSITION

Assistant Professor of Informatics at Department of Mathematics and Informatics, University of Cagliari

WORK EXPERIENCE

2017 – present Assistan Professor at DMI University of Caglairi – Italy 2007 - 2017Research Collaborator at DIEE University of Caglairi – Italy Contract Professor at University of Caglairi – Italy 2004 - 2010Researcher of Statistics and Informatics – Porto Conte ricerche- Italy 2008 - 2010Research collaborator at NOEL Lab, University of California, Berkeley, US 2006 2007 Research Collaborator at Physics Dept.. University of Caglairi – Italy 2003 - 2007Post Doc at Physics Dept.. University of Caglairi – Italy 2001-2002 Visiting Scientist at EECS University of California, Berkeley, US 2001 Post Doc at EECS University of California, Berkeley, US 2000 Visiting Scientist at IPR University of Maryland, Washington DC, US 1999 PhD In Physics, University of Cagliari and IPR Maryland 1997-2000 Researcher on Virtual Reality at AILUN - Nuoro, Italy 1996-1997

EDUCATION AND TRAINING

2009-2012 Ph.D. in Software Engineering University of Cagliari (Italy)
 1997-2001 Ph.D. in Physics University of Cagliari (Italy)

1995 Degree in Physics University of Cagliari (Italy)

Abilitazione Scientigica Nazionale a Professore Associato ssd 01/B1 (inf 01)
Abilitazione Scientigica Nazionale a Professore Associato ssd 09/H1 (ing-inf 05)



PERSONAL SKILLS

Mother tongue(s)

Italian

Other language(s)

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
C1	C1	C1	C1	C1
IELTS and CLA - University of Caglairi				
B1	B1	B1	B1	B1

English

French

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user Common European Framework of Reference for Languages

Communication skills

Excellent communication skills in English acquired during various years spent in US, as Workshops and Conferences Principal Organizer, Chair and Talks.

Organisational / managerial skills

I lead teams of Post-Doc, Ph.D students and Master students. I am Principal Investigator and Coordinator of scientific projects financed through competition among pairs calls and I direct all the people involved within the projects. I am vice-coordinator of the Ph.D. board in Mathematics and Informatics at University of Cagliari. I am the founder of a Spin-Off on blockchain technologies at University of Cagliari. I collaborate with researchers groups in England, New Zealand, Israel, US, Canada, France, Germany, Finland, Hong Kong, China. I organized about twenty international conferences and workshops as well as two summer schools.

Job-related skills

I do have expertise in in Blockchain Software Engineering, in complex networks analysis and complex network systems. Expertise on Statistics (teacher of Statistics at University of Cagliari)

Driving licence

ADDITIONAL INFORMATION



Projects

-Responsabile Scientifico (Principal Investigator) project "ABATA", MISE call 2019, euro 900.000

-Responsabile Scientifico (Principal Investigator) projetc "CryptoVoting" on Blockchain, 2014-2020 POR FESR Sardegna 2014 – 2020 seconf call 17 -10-2018, euro 364.000, from november 2018..

-Responsabile Scientifico (Principal Investigator) projetc "CryptoTrading" on Blockchain, 2014-2020 POR FESR Sardegna 2014 – 2020, - Asse 1 Azione 1.1.3 Strategia 2 "Creare opportunità di lavoro favorendo la competitività delle imprese" Programma di intervento 3 "Competitività delle imprese" Aiuti per Progetti di Ricerca e Sviluppo-, euro 170.000. from 13-11-2017.

-Responsabile Scientifico (Principal Investigator) progect CAFCha on Blockchain, Certification of Agrifood Chain, 2014-2020 POR FESR Sardegna 2014 – 2020, -Asse 1 Azione 1.1.3 Strategia 2 "Creare opportunità di lavoro favorendo la competitività delle imprese" Programma di intervento 3 "Competitività delle imprese" Aiuti per Progetti di Ricerca e Sviluppo-, euro 505.000 from 20-11-2017.

RAS Integrated Facilitation Program (PIA) for Industry, Artisanship and Services, call 14/10/2008, project No. 265, Advanced Technologies for Software Measuring and Integrated Management, TAMIGIS, collaborator.

L.R. 7/2007: LEAN 2.0: Un Approccio Lean per Abilitare l'Internet del Futuro - Eur 250.000, collaborator (2012-2015).

EURACE: studio di modelli economici e di un simulatore ad agenti dell'economia europea: Progetto U.E. STREP - Eur 2.200.000 (260.000 to Cagliari Unit) collaborator (2006-2009).

tOSSad - towards Open Source Software adoption and dissemination, Progetto Europeo IST-3, collaborator.

Complex Markets: studio dei mercati finanziari dal punto di vista della teoria della complessità 2008, collaborator.

Supporting the coordination of Visiting Professor project, University of Cagliari, "Control of nonlinear dynamic systems, impulsive control theory and its applications to chaotic communication systems" 14.000 Eur, 2007.

Supporting the cordination of project Master&Back of Regione Sardegna: "Studiare la transizione del caos con il formalismo della termodinamica non estensiva applicata al circuito di Chua", 28.800 Eur 2006/07-2007/08.

Regione Autonoma della Sardegna (RAS), Regional Law No. 7, 2007 on Promoting Scientific Research and Technological Innovation in Sardinia, call 14/2/2009, collaborator.

Technological transfer

Founder member of a Spin-Off of University of Cagliari on blockchain technologies and its applications.

Memberships

- Member of the PhD board at DMI University of Cagliari, Italy
- 1996 member of INFM (Istituto Nazionale di Fisica della Materia)
- 1998-1999 and 2002-2003 member of Material Research Society (MRS)
- 1999 member of IRP (Institute of Plasma Research) at University of Maryland in College Park, (USA).
- 2000 staff member of NOEL LAB and ERL University of California , Berkeley
- Member of SLACS/INFM/CNR Dip. Di Fisica, Cagliari (IT) 2003-2007
- Member of INFN, sezione di Cagliari, 2004 2007.
- Member of S.I.F. (Societa' Italiana di Fisica) 2003-2007.
- From 1987 member of ANPDI (Associazione Nazionale Paracadutisti D'Italia).

Presentations

- Invited talk at Blockchain Connect Conference, San Francisco CA USA, January 2019, "Blockchain Oriente Software Engineering: Challenges and New Directions" R. Tonelli e "ABCDE: Agile Block Chain Dapp Engineering" Roberto Tonelli, University of Cagliari - DMI – AgileGroup.
- Talk "Implementing a microservices system with blockchain smart contracts" IWBOSE, 2nd International Workshop on Blockchain Oriented Software Engineering, Workshop of SANER 2019, February 24, Hangzhou, China.
- University of Cagliari, student seminar in italian: "La tecnologia Blokchain", 9/2/2019
- University of Cagliari, 10/11/2017, seminar: "The parity wallet case" problems in blockchain and Smart Contracts.
- Talk at: "Scientific School on Blockchain", Pula June 2019, organized by CRS4 and DMI with financial support by Sardegna Ricerche.
- Invited talk to WETSEB 2018, Gothenburg Sweden, Workshop of ICSE, "A road map to Software Engineering for Blockchain: open problems and challenges" on Blockchain Software Engineering and Smart Contracts.
- Introductory talk "Blockchain Oriented Software Engineering" and chair of IWBOSE, 1th International Workshop on Blockchain Oriented Software Engineering, Workshop of SANER 2018, March 20, Campobasso, Italy.
- Talk "Smart Contracts Vulnerabilities: A Call for Blockchain Software Engineering?", IWBOSE, 1th International Workshop on Blockchain Oriented Software Engineering, Workshop of SANER 2018, March 20, Campobasso, Italy.
- Introductory talk to "WETSOM 2015, workshop of ICSE", Florence Italy 2015.



- Introductory talk to "Agile Methods. Large-Scale Development, Refactoring, Testing, and Estimation" XP 2014 Roma Italy.
- Talk: "Two Case Studies on Clusterization of Refactored Classes" RefTest 2013, Wien.
- ETSM 2009 "Statistical distributions and Modeling of Software Networks", Pula, Italy May 2009.
- XP2009, "An analysis of bug distribution in object oriented systems", Pula, Italy May 2009.
- "Complex Systems", Complex Market Meeting, Cagliari, 21st Feb. 2006.
- Talk "The fracture of composite materials" at "AFRICAN MRS2003", Johannesbourg (South-Africa) 2003.
- Talk "Coupled Modes Versus Nonlinear Scrhodinger Equation for Wave Propagation in Continuous Media", International Conference on Waves and Stability in Continuous Media "WASCOM 2003", Villasimius (CA) Italy 2003.
- "The model of Chua's atom" ISCAS 2002, Scottsdale-Phoenix, AZ (USA) 2002
- "Chaotic modeling for fracture in composite materials" International Workshop on synchronization, pattern formation and spatio-temporal chaos in coupled chaotic oscillators, CHAOS' 98, Santiago di Compostela, Spain,1998;
- Talk "Feedback Synchronization Using Pole Placement Control", "Dynamics Days 1999" Como Italy (1999).
- Talk "Fracture in Composites, a Nonlinear Dynamic Scheme", "MRS 1998 Fall Meeting", Boston (USA), 1998.
- Talk "From Bifurcations to Chua's Periodic Table", "MRS 2002 Spring Meeting", Sanfrancisco (USA), 2002
- Talk "The fracture of Composite Materials" at "Plasticity of Materials", Granada, Spagna 1998.
- Talk "Non Extensive Entropies and Weak Sensitivity at the Edge of Chaos", "8th Granada Seminar on Computational and Statistical Physics", 7-10 Febbraio 2005, Granada, Spain.
- Talk "What Entropy at the Edge of Chaos?", "NextSigmaPhi" (NonextensiveThermodynamics), Colymbari, Crete, Greece, 12-18 Aug. 2005.
- Talk "The model of Chua's Atom and the Route to Bifurcations", "Dynamics Days 2003", Scottsdale-Phoenix, AZ (USA) 2003;

Conferences

Principal Organizer e Chair of WETSEB 2020 (Workshop on Emerging Trends in Software Engineering for Blockchain), workshop of ICSE, , Seoul, South Korea, 27 May 2020.

Principal Organizer e Chair of IWBOSE 2020 (Int. Workshop on Blockchain Oriented Software Engineering), workshop of SANER, London - Ontario, Canada, 18 February 2020

Principal Organizer e Chair of WETSEB 2019 (Workshop on Emerging Trends in Software Engineering for Blockchain), workshop of ICSE, Montreal, canada, 27 May 2019.

Principal Organizer e Chair of IWBOSE 2019 (Int. Workshop on Blockchain Oriented Software Engineering), workshop of SANER, Szen, China, 20 February 2019

Principal Organizer e Chair of 26th ESUG (European Smalltalk User Group) 2018, conference, 10-14 September 2018, Cagliari, Italy.

Principal Organizer e Chair of WETSEB 2018 (Workshop on Emerging Trends in Software Engineering for Blockchain), workshop of ICSE, Gothenburg, Sweden, 27 May 2018.

Principal Organizer e Chair of IWBOSE 2018 (Int. Workshop on Blockchain Oriented Software Engineering), workshop of SANER, Campobasso, Italy, 20 March 2018.

Principal Organizer e Chair of WETSOM 2017, workshop of ICSE, Buenos Aires, Argentina, May 2017.

Coordiantor, Chair (single) and Editor for six Scientific Workshops of XP2017, Cologne germany, May 2017.

Principal Organizer and Chair of RefTest 2016 Workshop, co-located with XP2016, Edinburg UK, May 2016.

Principal Organizer and Chair of WETSOM 2016, workshop of ICSE, Austin – Texas USA 2016. Principal Organizer and Chair of WETSOM 2015, workshop of ICSE, Florence – Italy 2015.

Principal Organizer and Chair of RefTest 2015 Workshop, co-located with XP2015, Helsinki, May 2015.

Principal Organizer, Chair and Editor of RefTest 2014 Workshop, co-located with XP2014, Rome, May 2014.

Principal Organizer, Chair and proceedings manager of RefTest 2013 Workshop, co-located with XP2013, Wien, June 2013

Organizer for XP2012 Scientific Workshop, Malmo May 2012.

Organizer and Track-Chair for XP2013 Scientific Workshop, Wien, May 2013.

Organizer and Track-Chair for XP2014 Scientific Workshop, Rome, May 2014.

Organizer and Track-Chair for XP2015 Scientific Workshop, Helsinki, May 2015.

PC member of WETSOM 2011, workshop of ICSE, Honolulu, Hawaii, USA 2011.

PC member of WETSOM 2012, workshop of ICSE, Zurich, May 2012.

PC member of WETSOM 2013, workshop of ICSE, Sanfrancisco, May 2013.

PC member of XP2013 Scientific Workshop, Wien, May 2013.

PC member of XP2014 Scientific Workshop, Rome, May 2014.

PC member of XP2015 Scientific Workshop, Helsinki, May 2015.

PC member of AGILE 2015, Washington DC, USA, August 2015.

PC member of XP2016 Scientific Workshop, Edimburg – UK, May 2016.

PC member of XP2017, Cologne - Germany, May 2017.

PC member of WTSC17 (International Workshop on Trusted Smart Contracts)

PC member of WTSC18 (International Workshop on Trusted Smart Contracts)

PC member of WTSC19 (International Workshop on Trusted Smart Contracts)

Guest Editor of special issues Journals on Blockchain topics:

Editor of volume: "IEEE 2nd International Workshop on Blockchain Oriented Software Engineering", IEEE



Guest Editor

Computer Society (2019), IWBOSE 19. IEEE Catalog Number: CFP19P97-ART ISBN: 978-1-7281-1807-9.

Editor of volume: "IEEE 1nd International Workshop on Blockchain Oriented Software

Engineering", IEEE Computer Society (2018), IWBOSE 18. IEEE Catalog Number: CFP18P97-ART ISBN: 978-1-5386-5986-1.

Editor of Special Issue "Blockchain Technology and Applications" for Journal "Technologies – MDPI" Special Issue "Advances in Blockchain Technology and Applications" per il Journal "Applied Sciences-MDPI"

Prize for the top-50 most influential papers on blockchain in 2018, received on January 2019 from Blockchain Connect Conference, San Francisco - CA – USA.

Honours and awards

Prize for the best PhD thesis in Software Engineering: "Power Laws in Software Systems", DIEE Electrical and Electronics Eng. Dept., Universita' degli Studi di Cagliari, Italy, committee president e Prof. Pekka Abrahamsson.

Acnowledgement and publication of: integer number sequences "Fibonacci-like", on The On-Line Encyclopedia of Integer Sequences, AT&T-USA, numbers A131600 e A131601 fo rcomputing topological entropies in shift spaces and in cellular automata.

Prize of the University of Cagliari for young researchers Universita' degli Studi di Cagliari, 5 Milioni di Lire Italiane, 2000/01

Prize and support for young researchers of Regione Sardegna (RAS) on "Analisi di sistemi dinamici non-lineari con simulazioni numeriche al calcolatore", 8 Milioni di Lire Italiane, 1999.

Publications

- A Pinna, S Ibba, G. Baralla, M Marchesi, R Tonelli "A Massive Analysis of Ethereum Smart Contracts. Empirical study and code metrics". IEEE Access 7, 78194-78213 2019.
- R Tonelli, S Ducasse, M Marchesi, A Bracciali, "IWBOSE 2019 Preface", Proceedings of ICSE 2019.
- M Ortu, M Marchesi, R Tonelli "Empirical analysis of affect of merged issues on GitHub" Proceedings of the 4th International Workshop on Emotion Awareness in Software Engineering 2019.
- L Cocco, R Tonelli, M Marchesi "An Agent-Based Artificial Market Model for Studying the Bitcoin Trading" IEEE Access 7, 42908-42920, 2019.
- L. Cocco, R. Tonelli, M. Marchesi, "An agent based model to analyze the bitcoin activity and acomparison with the gold mining industry", Future Internet 11 (1), 8.
- S Ibba, A Pinna, M Lunesu, M Marchesi, R Tonelli "Initial Coin Offerings and Agile Practices." Future Internet 10 (11), 103
- Roberto Tonelli, Maria Ilaria Lunesu, Andrea Pinna, Davide Taibi, and Michele Marchesi, "Implementing a Microservices System with Blockchain Smart Contracts", Proceedings of International Workshop on Blockchain Oriented Software Engineering (IWBOSE), 2019, co-located with SANER 2019, Hangzhou, Cina
- R. Tonelli e D. Puligheddu, Book chapter "Managing CRM with Fabric Hyperledger blockchain technology", book chapter of --Blockchain and Web 3.0: Social, economic, and technological challenges ---Editors: Massimo Ragnedda, Northumbria University at Newcastle, Giuseppe Destefanis, School of Computer Science, University of Hertfordshire -- Routledge Editor.
- M Marchesi, L Marchesi, R Tonelli "An Agile Software Engineering Method to Design Blockchain Applications" arXiv preprint arXiv:1809.09596 - Proceedings of Central and Eastern European Software Engineering Conference Russia, Moscow, Russian Federation, October 12–13, 2018 (CEE-SECR '18).
- Gavina Baralla, Simona Ibba, Michele Marchesi, Roberto Tonelli and Sebastiano Missineo "A blockchain based system to ensure transparency and reliability in food supply chain" European conference on Parallel processing 2018, 379-391 Torino-Italy
- Marco Ortu, Tracy Hall, Michele Marchesi, Roberto Tonelli, David Bowes, Giuseppe Destefanis "Mining Communication Patterns in Software Development, a GitHub Analysis" Proceedings of the 14th International Conference on Predictive Models and Data Analytics in Software Engineering 2018/10/10
- Pinna, Andrea, Tonelli, Roberto, Orrú Matteo, Marchesi, Michele (2018). "A Petri Nets Model for Blockchain Analysis." COMPUTER JOURNAL, p. 1-15, ISSN: 0010-4620, doi: 10.1093/comjnl/bxy001.
- 2018 IEEE 1st International Workshop on Blockchain Oriented Software Engineering (IWBOSE)



Proceedings Preface, Roberto Tonelli, Stéphane Ducasse, Gianni Fenu, and Andrea Bracciali, DOI 10.1109/IWBOSE.2018.8327540

- Giuseppe Destefanis, Michele Marchesi, Marco Ortu, Roberto Tonelli, Andrea Bracciali, Robert Hierons "Smart Contracts Vulnerabilities: a Call for Blockchain Software Engineering", Proceedings of International Workshop on Blockchain Oriented Software Engineering (IWBOSE), 2018/3/20, co-located with SANER 2018, Campobasso Italy.
- Gianni Fenu, Lodovica Marchesi, Michele Marchesi, Roberto Tonelli, "The ICO Phenomenon and its Relationships with Ethereum Smart Contracts Environement", Proceedings of International Workshop on Blockchain Oriented Software Engineering (IWBOSE), 2018/3/20, co-located with SANER 2018, Campobasso Italy.
- Simona Ibba, Gavina Baralla, Andrea Pinna and Roberto Tonelli, "Survey: how much the academic startups know and use Agile Software and Lean Startup methodologies?", accepted for FIAREX 2018, May 2018, Porto, Portogallo.
- Roberto Tonelli, Andrea Pinna, Gavina Baralla and Simona Ibba, "Ethereum Smart Contracts as Blockchain-oriented Microservices", accepted for MADE 2018, May 2018, Porto, Portogallo.
- Valentina Lenarduzzi, Maria Ilaria Lunesu, Michele Marchesi and Roberto Tonelli, "Blockchain applications for Agile methodologies", XP 2018, May 2018, Porto, Portogallo.
- Marco Ortu, Andrea Pinna, Roberto Tonelli, Michele Marchesi, David Bowes and Giuseppe Destefanis "Angry-Builds: An Empirical Study Of Affect Metrics and Builds Success on GitHub Ecosystem", XP 2018, May 2018, Porto, Portogallo.
- Giuseppe Destefanis, Mahir Arzoky, Steve Counsell, Stephen Swift, Marco Ortu, Roberto Tonelli, Michele Marchesi, "113 Times Tomcat: a Dataset", PeerJ preprint, Feb. 2018.
- Marco Ortu, Giuseppe Destefanis, Steve Counsell, Michele Marchesi, Roberto Tonelli, "Connecting the
 Dots, Measuring Effectiveness and Affectiveness in Software Systems", SEMOTION 2017, 2nd
 International Workshop on Emotion Awareness in Software Engineering (SEmotion), 2017 IEEE/ACM.
- Concas Giulio, Marchesi Michele, Monni Cristina, Orru' Matteo, Tonelli Roberto, "Software Quality and Community Structure in Java Software Networks", INTERNATIONAL JOURNAL OF SOFTWARE ENGINEERING AND KNOWLEDGE ENGINEERING, vol. 27, (2017) p. 1063-1096, ISSN: 0218-1940, doi: 10.1142/S0218194017500401
- M Ortu, G Destefanis, S Counsell, S Swift, R Tonelli, M Marchesi, "How diverse is your team?" Investigating gender and nationality diversity in GitHub teams" JOURNAL OF SOFTWARE ENGINEERING RESEARCH AND DEVELOPMENT, (2017) vol. 5, ISSN: 2195-1721, doi: 10.1186/s40411-017-0044-y
- R Tonelli, S Counsell, G Destefanis, A Murgia, E Tempero, "Preface to 8th Workshop on Emerging Trends in Software Metrics" 8th Workshop on Emerging Trends in Software Metrics (WETSoM), 2017 IEEE/ACM, 1-1.
- S Porru, A Pinna, M Marchesi, R Tonelli, "Blockchain-oriented software engineering: Challenges and new directions" Proceedings of the 2017 IEEE/ACM 39th International Conference on Software Engineering Companion, ICSE-C 2017. p. 169-171, ISBN: 978-1-5386-1589-8, Buenos Aires, Argentina, 20-28 May 2017, doi: 10.1109/ICSE-C.2017.142.
- G Destefanis, M Ortu, S Counsell, S Swift, R Tonelli, M Marchesi, "On the randomness and seasonality
 of affective metrics for software development" Proceedings of the ACM Symposium on Applied
 ComputingVolume Part F128005, 3 April 2017, Pages 1266-127132nd Annual ACM Symposium on
 Applied Computing, SAC 2017.
- Destefanis G, Ortu M, Counsell S, Swift S, Marchesi M, Tonelli R., "Software development: do good manners matter?" PEERJ COMPUTER SCIENCE, vol. 2, (2016), p. 1-35, ISSN: 2376-5992, doi: 10.7717/peerj-cs.73
- Counsell S., Murgia A., Tempero E., Tonelli R., "Message from the Workshop Chairs-WETSoM 2016", Proceedings of the 7th Workshop on Emerging Trends in Software Metrics (WETSoM), 2016 IEEE/ACM, pp. Vii
- "Estimating Story Points from Issue Reports", Simone Porru, Alessandro Murgia, Serge Demeyer, Michele Marchesi, Roberto Tonelli, ACM Proceedings of the The 12th International Conference on Predictive Models and Data Analytics in Software Engineering, sett. 2016
- "How diverse is your team? Investigating gender and nationality diversity in GitHub teams", Marco Ortu, Giuseppe Destefanis, Steve Counsell, Stephen Swift, Michele Marchesi, Roberto Tonelli, PeerJ Preprints https://doi.org/10.7287/peerj.preprints.2285v1 CC BY 4.0 Open Access, Jul 2016.



- "Software development: do good manners matter?", Giuseppe Destefanis, Marco Ortu, Steve Counsell, Michele Marchesi, Roberto Tonelli, PeerJ, July 2016, DOI 10.7717/peerj-cs.73
- "Arsonists or firefighters? Affectiveness in agile software development", M.Ortu, G.Destefanis, S.Counsell, S. Swift, R. Tonelli, M. Marchesi, Agile Processes, in Software Engineering, and Extreme Programming, Volume 251 of the series Lecture Notes in Business Information Processing pp 144-155, May 2016 10.1007/978-3-319-33515-5_12
- "The emotional side of software developers in JIRA" Marco Ortu, Alessandro Murgia, Giuseppe Destefanis, Parastou Tourani, Roberto Tonelli, Michele Marchesi, Bram Adams, ACM Proceedings of the 13th International Workshop on Mining Software Repositories (MRS 2016), Pag. 480-483, May 2016.
- "How do Python programs use inheritance? a replication study", Matteo Orru', Ewan Tempero, Michele Marchesi, Roberto Tonelli, IEEE Asia-Pacific Software Engineering Conference (APSEC) Pag. 309-315, Dec. 2015, ISBN: 978-1-4673-9644-8
- "A Preliminary Study on Mobile Apps Call Graphs through a Complex Network Approach", Matteo Orru', Simone Porru, Roberto Tonelli, Michele Marchesi, 2015 11th International Conference on Signal-Image Technology & Internet-Based Systems (SITIS), Pag. 482-488, Nov. 2015.
- "A curated benchmark collection of python systems for empirical studies on software engineering", Matteo Orrú, Ewan Tempero, Michele Marchesi, Roberto Tonelli, Giuseppe Destefanis, ACM Proceedings of the 11th International Conference on Predictive Models and Data Analytics in Software Engineering, Pag. 2, Oct. 2015.
- S Counsell, A. Visaggio, E Tempero, R Tonelli, "Preface to 6th Workshop on Emerging Trends in Software Metrics" 6th Workshop on Emerging Trends in Software Metrics (WETSoM), 2015 IEEE/ACM, pp. 1021-1022
- S Counsell, E Tempero, R Tonelli, A. Visaggio, "Message from the Chairs" 6th Workshop on Emerging Trends in Software Metrics (WETSoM), 2015 IEEE/ACM, pp.vii
- "Predicting software defectiveness through network analysis", Orru' Matteo, Monni Cristina, Marchesi Michele, Concas Giulio, Tonelli Roberto, CEUR Workshop Proceedings Volume 1820, 2015, Pages 36-478th Seminar on Advanced Techniques and Tools for Software Evolution, SATToSE 2015.
- "The jira repository dataset: Understanding social aspects of software development", Marco Ortu, Giuseppe Destefanis, Bram Adams, Alessandro Murgia, Michele Marchesi, Roberto Tonelli, Proceedings of the 11th International Conference on Predictive Models and Data Analytics in Software Engineering, Pag. 1, Oct. 2015.
- "Re-visiting the 'Maintainability Index;' Metric from an Object-Oriented Perspective", S Counsell, X Liu, S Eldh, R Tonelli, M Marchesi, G Concas, A Murgia, IEEE 2015, 41st Euromicro Conference on Software Engineering and Advanced Applications Pag. 84-87 Aug. 2015.
- "The evolution of knowledge in the refactoring research field", Matteo Orrú, Simone Porru, Michele Marchesi, Roberto Tonelli, ACM Scientific Workshop Proceedings of the XP2015 Pag.10, May 2015.
- "6th International Workshop on Emerging Trends in Software Metrics (WETSoM 2015)", Steve Counsell, Aaron Visaggio, Roberto Tonelli, Ewan Tempero, 2015 IEEE/ACM 37th IEEE International Conference on Software Engineering (ICSE) Vol. 2 Pag. 1021-1022, May 2015.
- "Are Bullies more Productive? Empirical Study of Affectiveness vs. Issue Fixing Time" M Ortu, B. Adams, G Destefanis, P Tourani, M Marchesi, R Tonelli, Proceedings of the 12th Working Conference on Mining Software Repositories Pag. 303-313 MSR 2015
- "Would you mind fixing this issue?" M Ortu, G Destefanis, M Kassab, S Counsell, M Marchesi, R Tonelli,
 International Conference on Agile Software Development, Agile Processes, in Software Engineering, and
 Extreme Programming, pag. 129-140, May 2015
- "Could micro patterns be used as software stability indicator?", M Ortu, G Destefanis, M Orru, R. Tonelli, M Marchesi, Patterns Promotion and Anti-patterns Prevention (PPAP), 2015 IEEE 2nd Workshop on, Pag. 11-12, March 2015.
- "Measurements to assess the effort related to different kinds of software maintenance", A Murgia, M.
 Ortu, R Tonelli, G Concas, M Marchesi, S Counsell, 20th IMEKO TC4 International Symposium and 18th
 International Workshop on ADC Modelling and Testing Research on Electric and Electronic
 Measurement for the Economic Uptum Benevento, Italy, September 15-17, 2014
- "Agile Methods. Large-Scale Development, Refactoring, Testing, and Estimation: XP 2014", T. Dingsøyr,
 N. Brede Moe, R. Tonelli, S. Counsell, C. Gencel, K. Petersen, International Workshops, Rome, Italy,
 May 26-30, 2014, Revised Selected Papers Springer Books, Vol. 199, Dec. 2014, Book.



- "On the influence of maintenance activity types on the issue resolution time" A Murgia, G Concas, R
 Tonelli, M Ortu, S Demeyer, M Marchesi, IEEE Proceedings of the 10th International Conference on
 Predictive Models in Software Engineering, Pag. 12-21, Sep. 2014
- "Research Report", R Tonelli, 2014, http://www.dsf.unica.it/~roberto/report3.pdf
- "Clustering of defects in Java software systems" G Concas, C Monni, M Orrù, R Tonelli, Proceedings of the 5th International Workshop on Emerging Trends in Software Metrics, Pag. 59-65, June 2014.
- "System performance analyses through object-oriented fault and coupling prisms", A Murgia, R Tonelli, M Marchesi, G Concas, S Counsell, S Swift, Proceedings of the 5th ACM/SPEC international conference on Performance, 2014
- "Are Some Refactorings Attached to Fault-Prone Classes and Others to Fault-Free Classes?" S.
 Counsell, S Swift, A Murgia, R Tonelli, M Marchesi, G Concas, Agile Methods. Large-Scale Development,
 Refactoring, Testing, and Estimation 2014.
- "Refactoring Clustering in Java Software Networks" G Concas, C Monni, M Orru, M Ortu, R Tonelli, Agile Methods. Large-Scale Development, Refactoring, Testing, and Estimation, Vol 199, Lecture Notes in Business Information Processing p. 121-135, 2014
- "Are Refactoring Practices Related to Clusters in Java Software?" G Concas, C Monni, M Orrù, R.Tonelli, Agile Processes in Software Engineering and Extreme Programming, 269-276, 2014
- "Software Metrics in Agile Software: An Empirical Study" G Destefanis, S Counsell, G Concas, R Tonelli, Agile Processes in Software Engineering and Extreme Programming, 157-170, 2014
- "The fractal dimension of software networks as a global quality metric" I Turnu, G Concas, M.Marchesi, R Tonelli, Information Sciences 245, 290-303 2013
- "A study of the community structure of a complex software network" G Concas, C Monni, M Orru, R Tonelli, Emerging Trends in Software Metrics (WETSoM), 2013 4th International Conf. On .2013
- "Conditional-based refactorings and fault-proneness: an empirical study" S Counsell, M Gatrell, R Hierons, A Murgia, R Tonelli, M Marchesi, et al, Software Testing, Verification and Validation Workshops (ICSTW), 2013 IEEE .2013
- "Entropy of some CK metrics to assess object-oriented software quality" I Turnu, G Concas, M Marchesi, R Tonelli, International Journal of Software Engineering and Knowledge Engineering Vol. 23, 2013
- "Micro Patterns in Agile Software" G Concas, G Destefanis, M Marchesi, M Ortu, R Tonelli, Agile Processes in Software Engineering and Extreme Programming, 210-222 2013
- "Effects of the fermentation process on gas-cell size two-dimensional distribution and rheological characteristics of durum-wheat-based doughs" S Fois, C Fadda, R Tonelli, M Sanna, PP Urgeghe, T Roggio, P Catzeddu, Food Research International 49 (1), 193-200 2012
- "A case study of the use of Open Source CMS in Public Administrations" G Destefanis, R Tonelli, L Cocco, G Concas, M Marchesi, Web Systems Evolution (WSE), 2012 14th IEEE International Symposium on, 31-34 2012
- "Micro Pattern Fault-Proneness" G Destefanis, R Tonelli, E Tempero, G Concas, M Marchesi, Software Engineering and Advanced Applications (SEAA), 2012 38th EUROMICRO 2012
- "Onset of chaotic phase synchronization in complex networks of coupled heterogeneous oscillators" F Ricci, R Tonelli, L Huang, YC Lai, Physical Review E 86 (2), 027201 2012
- "Entropy of the degree distribution and object-oriented software quality", I Turnu, M Marchesi, R Tonelli,
 Proceedings of the 3rd International Workshop on Emerging Trends in Software Metrics. 2012
- "An empirical study of software metrics for assessing the phases of an agile project" G Concas, M Marchesi, G Destefanis, R Tonelli, International Journal of Software Engineering and Knowledge Engineering Vol. 22, N. 4 Pag. 525-548, 2012
- "Refactoring and its relationship with fan-in and fan-out: An empirical study" A Murgia, R Tonelli, M Marchesi, G Concas, S Counsell, J McFall, S Swift, Software Maintenance and Reengineering (CSMR), 2012 16th European Conference, 2012
- "An analysis of anti-micro-patterns effects on fault-proneness in large Java systems" G Destefanis, R
 Tonelli, G Concas, M Marchesi, Proceedings of the 27th Annual ACM Symposium on Applied
 Computing, 1251-1253 2012.



- "Power laws in software systems" R Tonelli, Universita'degli Studi di Cagliari 2012, Ph.D. Thesys.
- "Mixing SNA and classical software metrics for sub-projects analysis" R Tonelli, G Destefanis, Proceedings of 11th WSEAS International conference on Software Engineering, 2012
- "On the distribution of bugs in the eclipse system" G Concas, M Marchesi, A Murgia, R Tonelli, I Turnu, Software Engineering, IEEE Transactions on 37 (6), 872-877 2011.
- "An empirical study of refactoring in the context of FanIn and FanOut coupling" A Murgia, R Tonelli, S
 Counsell, G Concas, M Marchesi, Reverse Engineering (WCRE), 2011 18th Working Conference on,
 372-376 2011
- "The fractal dimension metric and its use to assess object-oriented software quality" I Tumu, G Concas, M Marchesi, R Tonelli, Proceedings of the 2nd International Workshop on Emerging Trends in Software Metrics. 2011.
- "Effect of modified atmosphere packaging on Quality Index Method (QIM) scores of farmed gilthead seabream (Sparus aurata L.) at low and abused temperatures" M Campus, E Bonaglini, R.Cappuccinelli, MC Porcu, R Tonelli, T Roggio, Journal of food science 76 (3), S185-S191, 2011
- "Parameter-based refactoring and the relationship with fan-in/fan-out coupling" A Murgia, M.Marchesi, G Concas, R Tonelli, S Counsell, Software Testing, Verification and Validation Workshops (ICSTW), 2011 IEEE, 2011
- "Application of 2-D DIGE to formalin-fixed, paraffin-embedded tissues" A Tanca, D Pagnozzi, G Falchi, R Tonelli, S Rocca, T Roggio, S Uzzau, et al, Proteomics 11 (5), 1005-1011, 2011
- "Proteomic analysis of formalin-fixed, paraffin-embedded lung neuroendocrine tumor samples from hospital archives" A Tanca, MF Addis, D Pagnozzi, P Cossu-Rocca, R Tonelli, G Falchi, .et. Al Journal of proteomics 74 (3), 359-370, 2011
- "An analysis of SNA metrics on the Java Qualitas Corpus", R Tonelli, G Concas, M Marchesi, A Murgia, Proceedings of the 4th India Software Engineering Conference, 205-213, 2011
- "A modified Yule process to model the evolution of some object-oriented system properties" I Turnu, G Concas, M Marchesi, S Pinna, R Tonelli, Information Sciences 181 (4), 883-902, 2011
- "NMR analysis of seven selections of vermentino grape berry: metabolites composition and development" G Mulas, MG Galaffu, L Pretti, G Nieddu, L Mercenaro, R Tonelli, .et. Al, Journal of agricultural and food chemistry 59 (3), 793-802, 2011
- "Computing the fractal dimension-a global metrics for large software systems" G Concas, M Locci, M Marchesi, R Tonelli, I Turnu, Computational Intelligence and Software Engineering (CiSE), 2010
- "A machine learning approach for text categorization of fixing-issue commits on CVS", A Murgia, G Concas, M Marchesi, R Tonelli, Proceedings of the 2010 ACM-IEEE International Symposium on Empirical Software Engineering and Measurement, p. 6, 2010.
- "Assessing traditional and new metrics for object-oriented systems" G Concas, M Marchesi, A Murgia, S Pinna, R Tonelli, Proceedings of the 2010 ICSE Workshop on Emerging Trends in Software Metrics, 2010
- "Three algorithms for analyzing fractal software networks" M Locci, G Concas, R Tonelli, I Turnu, WSEAS Transactions on Information Science and Applications 7 (3), 371-380, 2010
- "Three efficient algorithms for implementing the preferential attachment mechanism in Yule-Simon Stochastic Process" R Tonelli, G Concas, M Locci, WSEAS Transactions on Information Science and Applications 7 (2), 176-185, 2010
- "An empirical study of social networks metrics in object-oriented software" G Concas, M Marchesi, A Murgia, R Tonelli, Advances in Software Engineering 2010, Vol. 2010.
- "Efficient implementation of the Yule-Simon stochastic process for modeling internet and software development activities" R Tonelli, G Concas, M Locci, Proceedings of the 9th WSEAS international conference on Applied computer Science, 2009
- "Empirical study on software metrics and issues in object oriented systems" A Murgia, G Concas, M Marchesi, S Pinna, R Tonelli, Emerging Trends in Software Metrics, 33, 2009
- "Empirical study of software quality evolution in open source projects using agile practices", A.Murgia, G
 Concas, R Tonelli, I Turnu, Proc. of the 1st International Symposium on Emerging Trends in Software



Engineering, 2009

- "An analysis of bug distribution in object oriented systems" A Murgia, G Concas, M Marchesi, R. Tonelli, I Turnu, arXiv preprint arXiv:0905.3296, 2009.
- "A dynamic model of software product generative process" G Concas, M Marchesi, S Pinna, R. Tonelli, I Turnu, Software Engineering Conference, 2008. APSEC'08. 15th Asia-Pacific, 43-50, 2008
- "Controlling Chua's circuits using computational verb controllers" R Tonelli, T Yang, International Journal
 of Robust and Nonlinear Control 18 (17), 1622-1636, 2008
- "Fibonacci-like sequences and shift spaces in symbolic dynamics" R Tonelli, arXiv:0708.4370v1, 8, 2007
- "Convergence to the critical attractor at infinite and tangent bifurcation points" R Tonelli, International Journal of Bifurcation and Chaos 16 (08), 2369-2375, 2006
- "Statistical descriptions of nonlinear systems at the onset of chaos", M Coraddu, M Lissia, R Tonelli, Physica A: Statistical Mechanics and its Applications 365 (1), 252-257, 2006
- "Numerical study of the oscillatory convergence to the attractor at the edge of chaos", R Tonelli, M Coraddu, The European Physical Journal B-Condensed Matter and Complex Systems 50 (1-2, 2006.
- "Entropy production and Pesin-like identity at the onset of chaos" R Tonelli, G Mezzorani, F Meloni, M Lissia, M Coraddu, Progress of theoretical physics 115 (1), 23-29, 2006
- "Non-extensive entropies and weak sensitivity at the edge of chaos" R Tonelli, M Lissia, M Coraddu, Modeling Cooperative Behavior in the Social Sciences 779 (1), 208-209, 2005.
- "What entropy at the edge of chaos?" M Lissia, M Coraddu, R Tonelli, arXiv preprint cond-mat/0501299, 2005.
- M. Lissia, M. coraddu and R. Tonelli "What Entropy at the Edge of Chaos", Proceedings of NEXT 2004, Complexity, Metastability and Nonextensivity, Erice 20-26 July 2004.
- "Weak insensitivity to initial conditions at the edge of chaos in the logistic map" M Coraddu, F Meloni, G Mezzorani, R Tonelli, Physica A: Statistical Mechanics and its Applications 340 (1), 234-239, 2004
- "Fracture in materials investigated by chaos theory" F Meloni, R Tonelli, F Aymerich, F Ginesu, CONFERENCE PROCEEDINGS-ITALIAN PHYSICAL SOCIETY 84. 377-388. 2003
- "Chua's Periodic Table", R Tonelli, F Meloni, International Journal of Bifurcation and Chaos 12 (07), 1451-1464, 2002
- "From bifurcations to Chua's periodic table" R Tonelli, LO Chua, F Meloni, MRS Proceedings 731, W5. 8, 2002
- "Mapping atoms to nonlinear Chua's circuits" R Tonelli, LO Chua, F Meloni, Circuits and Systems, 2002.
 ISCAS 2002. IEEE International Symposium on. 2002.
- "Feedback synchronization using pole-placement control", R Tonelli, YC Lai, C Grebogi International Journal of Bifurcation and Chaos 10 (11), 2611-2617, 2000.
- "Experimental definition of the basin of attraction for Chua's circuit" G Pegna, R Marrocu, R Tonelli, F Meloni, G Santoboni, International Journal of Bifurcation and Chaos 10 (05), 959-970, 2000
- "Fracture in Composites in a Nonlinear Dynamic Scheme" R Tonelli, F Meloni, F Aymerich International Journal of Bifurcation and Chaos 9 (12), 2363-2367, 1999.
- "Crack in composite materials- A chaotic analysis" R Tonelli, F Meloni, F Aymerich, F Ginesu International Conference on Advanced Composites(ICAC 98), Hurghada, Egypt, 1998
- "The Fracture of Composite Materials: A Chaotic Approach" R Tonelli, F Meloni, F Aymerich, MRS Proceedings 539, 195, 1998.

More than 1600 citations on scholar.

Citations

I hereby authorize the use of my personal details solely for circulation within the company in relation to the Italian Legislative Decree n° 196/2003.