



WORK EXPERIENCE

01/11/2019 – CURRENT – Milan, Italy

ASSOCIATE PROFESSOR – UNIVERSITÀ DEGLI STUDI DI MILANO

Dipartimento di Informatica | Education | gabriele.gianini@unimi.it | via Celoria 18, 20133, Milan, Italy

03/01/2005 – 31/10/2019 – Milan, Italy

ASSISTANT PROFESSOR – UNIVERSITÀ DEGLI STUDI DI MILANO

Teaching. Research.

EDUCATION AND TRAINING

01/12/1992 – 10/10/1996 – via Bassi 6, Pavia, Italy

PH.D. IN PHYSICS – Università degli Studi di Pavia

HONOURS AND AWARDS

2009

Best Research Paper Award at KES 2009 – 3rd International Conference on Digital Ecosystems and Technologies (DEST 2009)

"An Artificial Immune System approach to Anomaly Detection in Multimedia Ambient Intelligence" (M. Anisetti, A. Azzini, V. Bellandi, E. Damiani, G. Gianini e S. Marrara)

2018

Best Research Paper Award at KES 2018 – 22nd International Conference on Knowledge-Based and Intelligent Information & Engineering Systems

Julian Stier, Michael Granitzer, Gabriele Gianini, Konstantin Ziegler "Analyzing Neural Network Topologies: a Game Theoretic Approach"

2014

Best Research Paper Award at INFORSID 2014 – INFORSID 2014 Conference

"Tag Similarity in Folksonomies" – Hatem Mousselly Sergieh, Elöd Egyed-Zsigmond, Mario Döller, Gabriele Gianini, Harald Kosch et Jean-Marie Pinon

PATENTS

Title: System And Method For Managing Fraud Detection In A Financial Transaction System

Titre : Système Et Procédé Pour Gérer La Détection De Fraudes Dans Un Système De Transactions Financières – (Numéro de demande : 1753504, Numéro de soumission : 1000400573, Date de réception : 21 avril 2017, Demandeur : WORLDLINE/07/FR). Inventors : Olivier CAELEN, Gabriele GIANINI, Damiani ERNESTO - STATUS : Application

PUBLICATIONS

5 Selected Publications

- 1 - RACOON++: A Semi-Automatic Framework for the Selfishness-aware Design of Cooperative Systems – G. Lena Cota, S. Ben Mokhtar, G. Gianini, E. Damiani, J. Lawall, G. Muller, L. Brunie in **IEEE Transactions on Dependable and Secure Computing**, vol. PP, no.99, pp.1-1 (2017) - <https://doi.org/10.1109/TDSC.2017.2706286>
- 2 - A Retinex model based on Absorbing Markov Chains – G. Gianini, A. Rizzi, E. Damiani **Information Sciences** 327, 149-174 (2016) <https://doi.org/10.1016/j.ins.2015.08.015>
- 3 - Managing a Pool of Rules for Credit Card Fraud Detection by a Game Theory based Approach – Gabriele Gianini, Leopold Ghemmogne Fossi, Corrado Mio, Olivier Caelen, Lionel Brunie, Ernesto Damiani – **Future Generation Computer Systems**, 102, 549-561 (2020) <https://doi.org/10.1016/j.future.2019.08.028>
- 4 - SOAP processing performance and enhancement – J. Tekli, E. Damiani, R. Chbeir, G. Gianini in **IEEE Transactions on Services Computing** 5:3 (2012), pp. 387-403 <https://doi.org/10.1109/TSC.2011.11>
- 5 - Multi-disease big data analysis using beetle swarm optimization and an adaptive neuro-fuzzy inference system – P. Singh, A. Kaur, R. Singh Batth, S. Kaur, G. Gianini, **Neural Computing and Applications**, (2021) <https://doi.org/10.1007/s00521-021-05798-x>

A complete list of publications can be found on Scopus at <https://www.scopus.com/authid/detail.uri?authorId=7005964726>

(Scopus synthesis - documents by author 220, h-index 30, citation 3182 by 1980 documents)

TEACHING

Courses

Bachelor Courses:

Probability and Statistics (Calcolo delle Probabilità e Statistica/Statistica e Analisi Dati): 2004-2015, 2021-present

Medical Statistics (Faculty of Nursery): 2014-2015, 2020-present

Empirical Methods/Probability and Statistics (U.of Bolzano): 2011

Physica Models for Virtual Reality/Modelli Fisici per la Realtà Virtuale: 2006

Master Courses:

IT Project Management/Gestione Progetti IT: 2010-2018

Business Process Engineering: 2019-present

Computer Networks (U.of Bolzano): 2005-2009

Open Source Software Engineering (U.of Bolzano): 2009

Component Based Development (U.of Bolzano): 2004

PhD courses

Leveraging Machine Learning in Process mining: 2021

Introduction to Quantum Information and Cryptography: 2020

Introduction to Big Data Methods and Tools: 2016

Quality of Service in IP Networks: 2011

Introduction to Game Theory for Networking: 2009

Statistical Data Analytics Techniques for HEP (U.of Pavia): 1997-1998

Thesis Supervision

Supervision of 63 Bachelor or Master Theses. Supervisor of 11 Ph.D. Theses.

● HABILITATIONS & CERTIFICATIONS

2020 – CURRENT

Full Professorship Habilitations in Informatics/Computer Science Engineering

by the Italian Ministry of the University and Research (MIUR) - Settore Concorsuale 01/B1 - Informatica - Fascia: I – Abilitazione Scientifica Nazionale (ASN) Bando D.D. 2175/2018

by the Italian Ministry of the University and Research (MIUR) - Settore Concorsuale 09/H1 - Sistemi Di Elaborazione Delle Informazioni - Fascia: I – Abilitazione Scientifica Nazionale (ASN) Bando D.D. 2175/2018

● FELLOWSHIPS & VISITING POSITIONS

36 months – EBTIC/Khalifa University (UAE)

Senior Researcher Fellowship at EBTIC center, Khalifa University of Science and Technology, Abu Dhabi, United Arab Emirates (dal 04-09-2017 al 3-09-2020)

3 months – EBTIC/Khalifa University (UAE)

Research Fellowship at EBTIC center, Khalifa University of Science and Technology, Abu Dhabi, United Arab Emirates (dal 01-10-2016 al 31-12-2016)

1 month – Passau Universitat (DE)

Research Fellowship, Chair of Distributed Information Systems dell'Università di Passau (dal 12-10-2015 al 17-11-2015).

4 months – INSA Lyon (FR)

Research Fellowship, l'INSA de Lyon, group LIRIS/DRIM - Funding Agency: Region Rhone-Alpes, project CMIRA/AccueilPro (grant n.14.004390) from competitive call (dal 01-10-2014 al 28-02-2015)

1 month– Passau Universitat (DE)

Research Fellowship, Chair of Distributed Information Systems dell'Università di Passau. Funded by a 1 month scholarship for research mobility, from a competitive call DAAD (Deutscher Akademischer Austausch Dienst) (dal 12-01-2014 al 16-02-2014)

3 months – INSA Lyon (FR)

Research Fellowship, INSA de Lyon, group LIRIS/DRIM - Funding Agency: CNRS Rhône-Alpes (dal 01-10-2011 al 31-12-2011)

3 months – INSA Lyon (FR)

Research Fellowship, INSA de Lyon, group LIRIS/DRIM - Funding Agency: INSA dal 01-10-2013 al 31-12-2013,

1 month - Passau Universitat (DE)

Research Fellow, Chair of Distributed Information Systems dell'Università di Passau (dal 22-10-2012 al 07-12-2012)

6 months - CERN (CH)

Centro Europeo per la Ricerca Nucleare (Ginevre) Visiting Scientist (mobility supported by INFN) (vari periodi dal 01-01-1995 al 31-12-1999)

18 months - FERMILAB (USA)

Fermi National Accelerator Laboratory (Chicago) Visiting Scientist (mobility supported by INFN) (vari periodi dal 16-06-1991 al 10-12-1999)

● PROJECT AND RESEARCH RESPONSIBILITIES

Principal Investigator in the project SAMPSON funded by private institutions (ATOS / Worldline)

Principal Investigator del progetto SAMPSON - presso l'Università degli Studi di Milano: Credit Card Fraud Prevention: Performance Assessment and Management of rule pools (2017-2018) - funded by ATOS/Worldline (Lyon/Brussels). (Budget Euro 15,000.00)

Co-Principal Investigator in 2 research projects financed by public institutions

"Cloud-enabled Business Process Management As-a-Service", funded by ICT Fund project n.3093 (2016-2018) at EBTIC (Emirates Innovation Center) Khalifa University of Science and Technology (KUST) di Abu Dhabi. (Budget USD 3,577,029.00)

"A decision support system for AI applications in the oil and gas industry", selected for funding within the competition RDPETRO 2018 (international jury of industrial partners) supported by the Abu Dhabi National Oil Company (ADNOC) - (Budget USD 2,410,251.00).

Further activities and responsibilities

- Creation of 2 integrated networks for academic collaboration: the italian-german-french network of academic collaboration IRIXYS.
- Head of 1 research area (Information MOdeling) in the integrated tri-national network of academic cooperation (IRIXYS)
- Co-manager of 2 Italian-French exchange projects financed by the Italian-French University (VINCI, COOPERA)
- Responsible for UNIMI of a Marie Sklodowska-Curie project (Innovative Training Networks, H2020): CISC "Collaborative Intelligence for Safety Critical systems" (Budget: EU contribution Euro 3,605,548.32, UNIMI share Euro 229,099.68)

● MISCELLANEA

Member of the Group IEEE P2976 - Standard for XAI

Gruppo IEEE P2976 - Standard for XAI - eXplainable Artificial Intelligence for Achieving Clarity and Interoperability of AI Systems Design, dal 2021 - Working Group: XAI WG - Standard for XAI - eXplainable AI Working Group - Standards Committee: CIS/SC - Standards Committee - Society: IEEE Computational Intelligence Society

EDITORIAL ACTIVITIES

Associated editor for 4 international Computer Science journals

Associate Editor of the journal "Data Science and Engineering" (**DSEJ**) – Springer (dal Gennaio 2018) - la rivista è nel quartile **Q2** in Computer Science Applications (Scimago Journal Rank - SJR)

Associate Editor of the journal "Information" (**MDPI**) (Multidisciplinary Digital Publishing Institute) Section Board for 'Artificial Intelligence' (dal Giugno 2020) - la rivista è nel quartile **Q3** in Computer Science Applications (Scimago Journal Rank - SJR)

Associate Editor of the "Journal of Imaging Science and Technology" (**JIST**) (Society for Imaging Science and Technology) dal Marzo 2018 - la rivista è nel quartile **Q4** in Computer Science Applications (SJR Rank)

Associate Editor of the journal "Frontiers in Big Data" Speciality: Machine Learning and Artificial Intelligence dall'Aprile 2022.

Guest Editor of 8 Special Issues

1. Guest Editor of Special Issue for Journal of Imaging Science and Technology (JIST, Society for Imaging Science and Technology) – "IS&T 75th Anniversary Special Issue" (publication 2023), Eds. Sophie Triantaphyllidou, Gabriele Gianini, Teruaki Mitsuya, Kye Si Kwon, Steven Simske
2. Guest Editor of Special Issue for Computing (Springer) – "QoS and QoE in Large Scale wireless IoT Networks" (publication 2022), Eds. Ahmed Mostefaoui, Gabriele Gianini, Cheng Li, Ernesto Damiani
3. Guest Editor of Special Issue for Frontiers in Big Data "Software Engineering Challenges for Machine Learning" (2021), Eds. Gabriele Gianini, Michel Granitzer, Pierre-Edouard Portier, Christin Seifert
4. Guest Editor of Special Issue for MDPI Information ""Advances in Explainable Artificial Intelligence"" (2021), Eds. Gabriele Gianini, Pierre-Edouard Portier
5. Guest Editor of Special Issue for Computing (Springer) – Special Issue on "QoS and security in software for wireless and mobile micro-services" (2021), Eds. Ahmed Mostefaoui, Gabriele Gianini, Ernesto Damiani, Geon Min
6. Guest Editor of Special Issue for Journal of Electronic Imaging (JEI) – Special Issue "Retinex at 50", vol. 26 (3) (2017) Eds. Alessandro Rizzi, Marcelo Bertalmio, Gabriele Gianini, John McCann
7. Guest Editor of Special Issue for the International Journal of Computer Systems Sciences and Engineering (IJCSSE, CRL Publishing) - Special issue on Web Service Security, vol 21(5) (2006) Eds. Ernesto Damiani, Gabriele Gianini, Hiroshi Maruyama
8. Co-Editor del volume Sharing experiences on agile methodologies in Open Source Software development – Polimetrica (2006) Ed.s Gabriele Gianini, Alberto Sillitti (ISBN-13: 9788876990342)

Conference chair of 1 international conference

1. Co-chair of the 5th International Conference on Computing Sciences – Lovely Professional University Phagwara, Punjab, India (4th-6th December 2021)

Workshop Chair of 4 workshops

1. Co-chair of the workshop **MLWCOM 2020** (Machine Learning for Wireless Communications) <http://sesar.di.unimi.it/call/mlwcom-2020/> in conjunction with ISCC (International Symposium on Computers and Communications), Rennes – <https://conferences.imt-atlantique.fr/iscc2020/>
 2. Co-chair of the workshop **MLWCOM 2019** (Machine Learning for Wireless Communications) <http://sesar.di.unimi.it/call/mlwcom-2019/> in conjunction with ISCC (International Symposium on Computers and Communications), Barcelona – <http://paradise.site.uottawa.ca/iscc2019>
 3. Co-chair of Workshop **SESAMOSS 2005** @ OSS 2005 Sharing ExperienceS on Agile Methodologies in Open Source Software development (SESAMOSS) Monday, July 11, 2005 – Università di Genova, Italy within the "First International Conference on Open Source Systems" Workshop page: <http://ra.crema.unimi.it/sesamoss05/> conference page: <http://oss2005.case.unibz.it/index.html>
- Track Chair of **IEEE DEST-CEE 2012**: Track A "Foundations of Digital Ecosystems and Complex Environment", IEEE DEST-CEE 2012 : 6th IEEE International Conference on Digital Ecosystems Technologies - Complex Environment Engineering - <http://sesar.dti.unimi.it/DEST2012/>