

Europass Curriculum Vitae



Personal information

Surname(s) / First name(s)
Address(es)
Email(s)
Nationality(-ies)
Date of birth
Gender
Short Resume

Rucco, Matteo Ph.D.,

I am a data scientist with ten years of experience in data science for complex bioinspired systems, aerospace, elevators, HVAC, and medical industries. I have submitted more than ten patent applications and about 30 research papers about the definition and application of new data science pipelines. I earned a Ph.D. in Information Science and Complex Systems. In my Ph.D. I defined a new data-driven methodology that combines topology, information theory (i.e., persistent entropy), and automata theory for modeling bio-inspired complex systems behavior. I also ownl two certifications: AI for medicine issued by Deeplearning.AI, and Applied AI published by IBM. Currently, I am a R&D Project Manager at the Spindox Labs. In this capacity, my responsibilities include both coordination of Horizon 2020 European Project 1-SWARM (https://www.1-swarm.eu/), and the coordinating of new project proposals within European (Horizon Europe) and National frameworks. For example, I am interested in proposals about Trustworthy AI, extended reality modeling, and human-robot interaction. Also, my responsibilities include the leading of a data science team committed to executing both Data Science and Business Intelligence projects for business customers. I am committed to define new data-driven methodologies for making Artificial Intelligence systems more accurate, flexible, robust, safe and secure, explainable, and certifiable. In addition, I am the Topic editor for the Special Issue Formal Verification of Imaging Algorithms for Autonomous System (https://www.mdpi.com/journal/jimaging/ special issues/imaging autonomous system). Previously, I was a staff researcher at the Raytheon Technologies Research Center (RTRC). Before RTRC, I was a postdoc at the Italian National Council of Research, Institute of Applied Mathematics and Computer Science to develop a new computational solution for the subgraphs isomorphism problem by using graph databases: a pattern-matching approach. In addition, I was a co-founder of a start-up: advanced data analysis in medicine (ADAM). Machine learning as a service for aiding the diagnosis of brain cancer. I collaborate with several researchers to define Al-based solutions for the diagnosis of complex pathologies (gliomas, personalized management of critically ill patients, pulmonary embolism, thyroid nodules). In my latest publication, published in Scientific Report by Nature, I have defined a new data science pipeline, based on statistics and topological data analysis, to identify the risk factors for therapeutic failure (in-hospital death or intensive care unit transfer), the in-hospital occurrence of stroke/TIA and major bleeding in a cohort of critically ill patients with pre-existing atrial fibrillation admitted to a stepdown unit.

Desired employment/ Occupational field Lead of Data Science Team / Lead of R&D Lab

Rotes Phones

Current Position

3 May 2021 -Title of qualification Main activities and responsibilities

EU Project Coordinator / Solution project manager / Lead Data scientist

I am a Solution Project Manager at the Spindox Labs. In this capacity, my responsibilities include coordination of Horizon 2020 European Project 1-SWARM (https://www.1-swarm.eu/). I am also involved in coordinating new project proposals within European (Horizon Europe) and National frameworks. For example, I am interested in proposals about Trustworthy AI, extended reality modeling, and human-robot interaction. In this capacity, my responsibilities also include mentoring a data science team committed to executing both Data Science and Business Intelligence projects for private customers. My research focuses on defining new data-driven methodologies for making Artificial Intelligence systems more accurate, flexible, robust, safe and secure, explainable, and certifiable.

Name and address of employer Skills awarded

Spindox Labs (Italy)- Italy, Trento - Italy Business Project management, H2020

Business Project management, H2020 Project coordination, HE Proposal writing, Data Science at scale, Artificial Intelligence, CPS modeling and orchestration, Computer Vision, NL(P,G,U)

20 February 2017 - 01 April Staff 2021 vance

Staff Researcher - Data scientist at Raytheon Technologies Research Center - Advanced Laboratory of Embedded Systems (Italy)

ecvitemTitle of qualificationStaff Researcher Main activities and responsibilities

I was the PI for all the Data Science projects executed in RTRC-Italy. My research aims to increase the reliability of artificial intelligent (AI) systems used in safety-critical systems (e.g., self-flying avionics systems, medicine, etc.). My research is based on data science methods (e.g., machine learning for imaging, machine learning for NLP/NLU/NLG, topological data analysis, and statistics) and formal methods in computer science (e.g., probabilistic timed model checking, run-time verification). Some of the business problem where I am involved are: perception systems, expert systems based on NL, human-robot collaboration, multivariate prediction health maintenance, cyber pilot. I have co-authored the proposal for the EU-Factory of Future Project SHERLOCK (http://www.sherlock-project.eu/home/).

Name and address of employer

Advanced Laboratory of Embedded Systems a company controlled by United Technologies Research Center - Italy, Trento - Italy

Skills awarded

Skills awarded

Industrial Data Modelling, Machine Learning, Artificial Intelligence, Smart Buildings Occupant Profiling, Natural Language Processing,

Research experience

1 March 2016 - 28 February 2017

Main activities and responsibilities

Name and address of employer

Postdoctoral researcher at Italian National Council of Research, Institute of Applied Mathematics and Computer Science

Development of a new computational solution for the subgraphs isomorphism problem by using graph databases: a pattern matching approach.

Italian National Council of Research, Institute of Applied Mathematics and Computer Science, Genova - Italy

Graph isomorphism, Data visualization, Computational geometry, Mesh analysis, Assembly models analysis

November 2012 - February 2016

Title of qualification awarded

Main activities and responsibilities

Name and address of employer

Young researcher

Development of new algorithms and methods for topological data analysis and data modelling for bio medical complex systems.

Future and Emerging Technologies (FET) programme within the Seventh Framework Programme (FP7) for Research of the European Commission, under the FP7 FET-Proactive Call 8- DyMCS, Grant Agreement TOPDRIM, number FP7-ICT-318121.

Topological data analysis

Collaborator of TOPDRIM EU Project.

Skills awarded

Collaborator of Advanced Data Analysis in Medicine - Start-up, Spin-off at University of Salento

March 2013 - December 2016

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Trento, 04/04/2018 - Ai sensi dell'art. 13 del D. Lgs. 196/2003, autorizzo il trattamento dei dati personali contenuti nel presente curriculum vitae.

Title of qualification awarded Main activities and responsibilities

Researcher collaborator

Development of new Computer Assisted Detection (CAD) systems for cancer detection in magnetic resonance images analysis. The systems are based on statistical and machine learning approaches, e.g. principal component analysis (PCA), independent component analysis (ICA), linear disriminant analysis (Fisher-LDA) and artificial neuronal networks (back propagation, feed-forward, Levenberg-Marquardt) and are coded in MATLAB.

Name and address of employer Skills awarded

A.D.A.M. - spin-off at University of Salento Statistical data analysis and machine learning

Education and Training

March-April 2020 Topic Specialization on AI for Medicine: diagnosis, prognosis and treatment

Medicine is one of the fastest-growing and important application areas, with unique challenges like handling missing data. The specialization aimed to show by means of several practical experiences how to combine latest machine learning and deep learning technologies for: 1) working with 2D and 3D medical image data. 2) Apply tree-based models to improve patient survival estimates. 3) Randomized trials

to recommend treatments more suited to individual patients. 4) how to use natural language for labelling medical datasets.

Coursera - deeplearning.ai

Organizer

13 January 2013 - 4 April 2016

Final grade

Thesis

Topic

Ph.D. cum laude Topological Data Analysis for Modeling Complex Systems

Design and application of a new data driven methodology for extracting models of (biological) complex systems. The methodology is based on the geometrical representation of the data by applying techniques based on algebraic topology and then it uses formal methods in computer sciences, i.e. automata theory, for modeling the behavior of such systems.

Ph.D. in Information Science and Complex Systems - University of Camerino - Italy

Supervisor

Prof. E. Merelli

October 2012 Final grade Master's degree in Computer Science at University of Camerino - Italy

110 cum laude (out of 110)

Thesis

Data driven modeling of pulmonary embolism

Topic

I used techniques inspired by algebraic topology and machine learning for deriving a new score system (i.e., clinical prediction rules) for assigning a probability of occurrence of "pulmonary embolism". The innovations introduced by this system are: the system does not use imaging analysis (e.g., computarized), a patient is observed by 25 clinical variables and then geometrically represented by simplicial complexes. The analysis of simplicial complexes allows to extract the meaningful clinical variables that are used for training an artificial neuronal network for predicting the final diagnose.

Supervisor

Prof. E. Merelli

October 2009

Bachelor's degree in experimental Physics at University of Salento - Lecce - Italy 98 (out of 110)

Final grade Thesis

A non distructive tomographic device (NDT)

Topic

I assembled a tomographic device of first generation (the sample moves and the x-ray beam is in a fixed position) to be used for checking the presence of explosive powder in small containers of common use. The main feature of the hardware is that it was built by using cheapest small step-by-step AC motors. The algorithms for the profile reconstruction and analysis was coded in Matlab. For the sake of clarity, the algorithm for the profile reconstruction was based on the Raydon transformation.

Supervisor

Prof. G. De Nunzio

October 2008

Summer student at Fermilab (Chicago, USA)

Occupation or position held

Collaborator of the ILC experiment - Group 4 - Italian team

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Trento, 04/04/2018 - Ai sensi dell'art. 13 del D. Lgs. 196/2003, autorizzo il trattamento dei dati personali contenuti nel presente curriculum vitae.

Main activities and responsibilities Supervisor

Development of new algorithms for the study of efficiency of tracking detectors in High Energy physics.

Corrado Gatto - Italian National Institute of Nuclear Physics (INFN)

July 2001 Grade Institution Written and Spoken English for Speakers of Other Languages

6 (out of 12)

Trinity College London (UK)

Teaching experience

February 2015

Introduction to Computer Science - Professional Course for wood makers - AS-ESI Lecce - Italy.

February 2015

Substitute teacher in a public high school - Professional Institute G. Antinori - Civitanova Alta (Mc) - Italy.

From March 2013

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March 2015 - June 2015

November 2015 - March 2015 March 2014 - June 2014

November 2014 - March 2014 March 2013 - June 2013

March 2015 - May 2015

March 2014 - May 2014

March 2013 - May 2013

May - June 2011

Supervising/Co-Supervising experience

Ph.D Thesis

Teaching at University of Camerino, School of Science and Technology, Computer Science Division

Algorithms and Data Structure Laboratory of the B.Sc degree program in Computer Science (6 CFU)

Software engineering exam committee member (cultore della materia)

Adjunct Professor - Algorithms and Data Structure Laboratory of the B.Sc degree program in Computer Science (6 CFU)

Software engineering exam committee member (cultore della materia)

Adjunct Professor - Algorithms and Data Structure Laboratory of the B.Sc degree program in Computer Science (6 CFU)

Adjunct Professor - of Distributed Calculus and Coordination Laboratory of the M.Sc degree program in Computer Science (6 CFU)

Adjunct Professor - of Distributed Calculus and Coordination Laboratory of the M.Sc degree program in Computer Science (6 CFU)

Adjunct Professor - of Distributed Calculus and Coordination Laboratory of the M.Sc degree program in Computer Science (6 CFU)

Teacher for the professional training course: "Photographer in the digital age". - Discipline: optical physics. Organized by Ges.For. Bari - Italy.

 M. Piangerelli: A topological approach for fault detection in runtime system: the epileptic brain case study (ongoing)



M.Sc. Thesis

- J. Binchi: A new isomorphism for graphs and simplicial complexes
- R. Palladino: A graph rewriting approach applied to the homological scaffold of biological complex networks and for modeling their behavior (in progress). Joint with Catamarca University (Argentina)
- A. Bocci: analysis of non-relational Database for the Leaf House. Joint with Loccioni Group.
- P. Giuliodori: Prediction of energy consumption. Joint with Loccioni Group.
- A. Peretti: Linear regression with Python-GPU.
- E. Ruffini: Energy consumption prediction with Markov-Chain and probabilistic automata. Joint with Loccioni Group.

B.Sc. Thesis

- S. Belluccini: jPHEngine: A New Java High Performance Library For Computing Persistent Homology
- M. Vici: Topological analysis of embedded electrical signals. Joint with Loccioni Group.
- E. Rivosecchi: Arduino for improving the Human Machine Interface.
- L. Rossi: Application of persistent homology for finding minimum cycles in undirected graphs.
- J. De Berardinis: A semi-automatic tool for clustering.
- F. Svampa: A color based objects detection and recognition with Microsoft Kinect. Joint with Loccioni Group.
- J. Binchi: jHoles a java high performance tool for computing Clique Weight Rank Persistent Homology. Joint with Loccioni Group.
- M. Mariani: Infographics: an innovative approach for data visualization. Joint with Loccioni Group.
- D. Senigagliesi: Graphical optimization of the infographics for the Leaf Farm web-portal. Joint with Loccioni Group.

Other Jobs

From March 2012

Advanced Data Analysis in Medicine - A.D.A.M. Start Up, Spin-off at University of Salento

Title of qualification awarded Principal subjects/Occupational skills covered Co-founder

Name and type of organization providing education and training

Development of a computer assisted detection (CAD) system for cancer detection in magnetic resonance images analysis.

Advanced Data Analysis in Medicine - A.D.A.M. Spin-off at University of Salento. http://www.adamgroup.it

Scientific highlights

Topics

Physics. Computer Science. Statistics. Network analysis. Applied topology. Machine learning. Computer Science

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Lates Physics

Trento, 04/04/2018 - Ai sensi dell'art. 13 del D. Lgs. 196/2003, autorizzo il trattamento dei dati personali contenuti nel presente curriculum vitae.

Technical skills and competences

Advanced statistics: principal component analysis (PCA), independent component analysis (ICA), linear discriminant analysis (Fisher-LDA), advanced plotting, similarity systems (Jaccard, Dice). Network analysis: communities detection (cliques, comunicability, spectral analysis, etc...), Networks statistics: degree, centrality, etc.... Simplicial complexes construction: Vietoris-Rips, Witness, Clique-Weight-Complexes. Simplicial complexes analysis: persistent homology. Automatic learning systems: artificial neural networks (supervised and unsupervised, e.g., SOM, feed-forward, etc...). V&V cycle, True concurrency modeling: higher dimensional automata and Chu space representation, CCS algebra for interleaving and true-concurrent description of computational processes.

Personal skills and competences

Mother tongue(s)
Other language(s)
Self-assessment
European level(*)

English

Computer skills and competences

Driving licence(s)

Additional information

Italian

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
B2	B2	B2	B2	B2

^{(&#}x27;) Common European Framework of Reference (CEF) level

Data acquisition and analysis: Matlab, R, Weka. Programming Languages/Scripting/Editing: Java, C++ LaTeX (several professional works), (X/H)TML, CSS, PHP, ASP. Databases: SQL. Advanced knowledge of Microsoft Access and MySQL. Operating systems: All Microsoft OS's and Linux based systems. CAM and CAD: ArtCam, Mach, ArchiCad

European driving license - class B.

Publications

2021

Lorenzo Falsetti, , Matteo Rucco, Marco Proietti, Giovanna Viticchi, Vincenzo Zaccone, Mattia Scarponi, Laura Giovenali, Gianluca Moroncini, Cinzia Nitti, and Aldo Salvi.

Risk prediction of clinical adverse outcomes with machine learning in a cohort of critically ill patients with atrial fibrillation.

Scientific Report, 11(3):18925, 2021

2020

Matteo Rucco, Giovanna Viticchi, and Lorenzo Falsetti.

Towards personalized diagnosis of glioblastoma in fluid-attenuated inversion recovery (flair) by topological interpretable machine learning.

Mathematics, 8(5):770, 2020

Roberto Negro and Matteo Rucco.

Twelve-months volume reduction rate predicts regrowth and the time to regrowth in thyroid nodules submitted to laser ablation: a 5-year follow-up retrospective study. *Korean Journal of Radiology*, In press, 2020

LG Falsetti and M Rucco.

Risk factors for bleeding and stroke in a population of critically ill patients: a topology-based approach.

Submitted to CHEST, 2020

2019



Roberto Negro, Matteo Rucco, Annalisa Creanza, Alberto Mormile, Paolo Piero Limone, Roberto Garberoglio, Stefano Spiezia, Salvatore Monti, Christian Cugini, Ghassan El Dalati, et al.

Machine learning prediction of radiofrequency thermal ablation efficacy: A new option to optimize thyroid nodule selection.

European Thyroid Journal, pages 1-8

Matteo Rucco, Luca Tesei, and Emanuela Merelli. Topological run-time monitoring for complex systems. arXiv preprint arXiv:1908.03489, 2019

Matteo Rucco, Franca Giannini, Katia Lupinetti, and Marina Monti. A methodology for part classification with supervised machine learning. *AI EDAM*, 33(1):100–113, 2019

Nieves Atienza, Rocio Gonzalez-Diaz, and Matteo Rucco.

Persistent entropy for separating topological features from noise in vietoris-rips complexes.

Journal of Intelligent Information Systems, 52(3):637-655, 2019

2018

Marco Piangerelli, Matteo Rucco, Luca Tesei, and Emanuela Merelli. Topological classifier for detecting the emergence of epileptic seizures. *BMC research notes*, 11(1):392, 2018

2017

Matteo Rucco, Katia Lupinetti, Franca Giannini, Marina Monti, and Jean-Philippe Pernot.

Cad assembly retrieval and browsing.

In *IFIP International Conference on Product Lifecycle Management*, pages 499–508. Springer, 2017

Katia Lupinetti, Franca Giannini, Marina Monti, Matteo Rucco, and Jean-Philippe Pernot.

Identification of functional sets in mechanical assembly models. 2017

María José Jimenez, Matteo Rucco, P Vicente-Munuera, P Gómez-Gálvez, and Luis M Escudero.

Topological data analysis for self-organization of biological tissues.

In International Workshop on Combinatorial Image Analysis, pages 229–242. Springer, 2017

Nieves Atienza, Rocio Gonzalez-Diaz, and Matteo Rucco.

Separating topological noise from features using persistent entropy.

In Federation of International Conferences on Software Technologies: Applications and Foundations, pages 3–12. Springer, 2016

Matteo Rucco, Rocio Gonzalez-Diaz, Maria-Jose Jimenez, Nieves Atienza, Cristina Cristalli, Enrico Concettoni, Andrea Ferrante, and Emanuela Merelli.

A new topological entropy-based approach for measuring similarities among piecewise linear functions.

Signal Processing, 134:130-138, 2017

2016

Adane L Mamuye, Matteo Rucco, Luca Tesei, and Emanuela Merelli. Persistent homology analysis of rna.

Computational and Mathematical Biophysics, 4(1), 2016

Matteo Rucco, Adane Letta Mamuye, Marco Piangerelli, Michela Quadrini, Luca Tesei, and Emanuela Merelli.

Survey of topdrim applications of topological data analysis.

In CEUR Workshop Proceedings, volume 1748, page 1814, 2016

Lates Phuese

Nieves Atienza, Rocio Gonzalez-Diaz, and Matteo Rucco.

Separating topological noise from features using persistent entropy.

In Federation of International Conferences on Software Technologies: Applications and Foundations, pages 3–12. Springer, 2016

Matteo Rucco, Filippo Castiglione, Emanuela Merelli, and Marco Pettini. Characterisation of the idiotypic immune network through persistent entropy. In *Proceedings of ECCS 2014*, pages 117–128. Springer, 2016

Emanuela Merelli, Marco Piangerelli, Matteo Rucco, and Daniele Toller.

A topological approach for multivariate time series characterization: the epileptic brain.

In Proceedings of the 9th EAI International Conference on Bio-inspired Information and Communications Technologies (formerly BIONETICS), pages 201–204, 2016

Antonella Castellano, Marina Donativi, Roberta Rudà, Giorgio De Nunzio, Marco Riva, Antonella Iadanza, Luca Bertero, Matteo Rucco, Lorenzo Bello, Riccardo Soffietti, et al.

Evaluation of low-grade glioma structural changes after chemotherapy using dti-based histogram analysis and functional diffusion maps.

European radiology, 26(5):1263-1273, 2016

2015

Adane Mamuye, Emanuela Merelli, and Matteo Rucco.

Persistent homology analysis of the rna folding space.

In Proc. 9th EAI Conference on Bio-inspired Information and Communications Technologies (BICT 2015), 2015

Emanuela Merelli, Matteo Rucco, Peter Sloot, and Luca Tesei.

Topological characterization of complex systems: Using persistent entropy. *Entropy*, 17(10):6872–6892, 2015

Matteo Rucco, Enrico Concettoni, Cristina Cristalli, Andrea Ferrante, and Emanuela Merelli.

Topological classification of small dc motors.

In 2015 IEEE 1st International Forum on Research and Technologies for Society and Industry Leveraging a better tomorrow (RTSI), pages 192–197. IEEE, 2015

Matteo Rucco, David Sousa-Rodrigues, Emanuela Merelli, Jeffrey H Johnson, Lorenzo Falsetti, Cinzia Nitti, and Aldo Salvi.

Neural hypernetwork approach for pulmonary embolism diagnosis.

BMC research notes, 8(1):617, 2015

Matteo Rucco, Emanuela Merelli, Damir Herman, Devi Ramanan, Tanya Petrossian, Lorenzo Falsetti, Cinzia Nitti, and Aldo Salvi.

Using topological data analysis for diagnosis pulmonary embolism.

Journal of Theoretical and Applied Computer Science Vol, 9(1):41-55, 2015

2014

Emanuela Merelli, Matteo Rucco, Peter Sloot, and Luca Tesei.

Topdrim deliverable 3.2 september 2014 a topological characterization of s [b] systems.

science, 49:30, 2014

Jacopo Binchi, Emanuela Merelli, Matteo Rucco, Giovanni Petri, and Francesco Vaccarino

jholes: A tool for understanding biological complex networks via clique weight rank persistent homology.

Electr. Notes Theor. Comput. Sci., 306:5-18, 2014

2013 and previous

Rotes Phuse

LG Falsetti, E Merelli, M Rucco, C Nitti, T Gentili, M Pennacchioni, and A Salvi. A data-driven clinical prediction rule for pulmonary embolism. *European Heart Journal*, 34(suppl 1), 2013

D Barbareschi, V Di Benedetto, C Gatto, F Grancagnolo, F Ignatov, A Mazzacane, M Rucco, G Tassielli, and G Terracciano. High precision tracking in ilc experiments

Patents

2021

M. Rucco, C. Tonelli, J.M. Pasini, and R. N. Nichols. Elevator system, 04/06/2021

2019

M. Rucco, C. Tonelli, A. De Antoni, R. N. Nichols, and D. Polak. Method and system for elevator crowd prediction, 23/07/2019

M. Rucco, F. Smith, A. Ferrari, and J. Higley. Mining and deploying profiles in smart buildings, 09/04/2018

2018

M. Rucco, F. Smith, A. Ferrari, and J. Higley. User profiles for optimized smart buildings, 23/03/2018

M. Rucco, F. Smith, A. Ferrari, and J. Higley. Machine-learning method for conditioning individual or shared areas, 19/03/2018

M. Rucco, F. Smith, A. Ferrari, and J. Higley. Satisfaction measurement for smart buildings, 09/04/2018

M. Rucco, F. Smith, A. Ferrari, and J. Higley. Portable user profile for smart buildings, 09/04/2018

M. Rucco, F. Smith, A. Ferrari, and J. Higley. Detection de comportement anormal dans des batiments intelligents, 09/04/2018

M. Rucco, F. Smith, A. Ferrari, and J. Higley. Predicting the impact of flexible energy demand on thermal comfort, 19/03/2018

M. Rucco, F. Smith, A. Ferrari, and J. Higley. Extraction et daploiement de profils dans des batiments intelligents, 09/04/2018

Conferences, congresses and seminars



- Topological Data Analysis-Neural Network (University of Seville) November/2019 Prof. Rocio Diaz Gonzalez Invited speaker, Talk: Topological runtime monitoring of trained artificial neural network
- Topological Data Analysis-Neural Network (University of Seville) November/2018 Prof. Rocio Diaz Gonzalez Invited speaker, Talk: Modeling critically ill patients
- Applied Algebraic Topology (University of Southampton) 21/November/2016 -Jacek Brodzki - Invited, Talk: Topological data analysis and formal methods in computer science for modeling complex systems.
- INRIA (Paris) 28-30/June/2016 Frederic Chazall Invited, Talk: Topological Data Analysis and Information Theory towards a new approach for model selection
- Ghent University 27/June/2016 Tijl De Bie Invited, Talk: New frontiers in Data Analysis
- KU Leuven 02/June/2016 Stein Aerts Lab Invited, Talk: Topological Data Analysis for Gene Regulatory Networks
- Bioninformatics BICT 2015 Special Track 5/12/2015, New York
- Topdrim4Bio BICT 2015 Special Track 4/12/2015, New York (Co-Chair and Speaker)
- RTSI2015 IEEE Conference Torino, 17/09/2015
- TOPDRIM Workshop Invited Speaker: TOPDRIM FP7, Camerino, 22/07/2015
- PizzaSeminar @ Computer Science: Unicam, Camerino, 01/07/2015
- WebValley15 Invited Speaker: Fondazione Bruno Kessler, San Lorenzo in Banale, 22-27/06/2015
- TOPONETS: Satellite of NETSCI, Saragoza, 02/06/2015
- Colloquia: IAC Istituto Calcolo Applicato CNR, Rome, 5/2/2015
- European Conference on Complex System, Lucca, 09/2014
- TOPDRIM Meeting, VU University Amsterdam, 09/2014
- IV scientific day Camerino, June 2014
- CS2BIO'14, Berlin, 6-7 June 2014
- ISMRM Magnetic Resonance in Medicine, Perugia, 2013
- Topdrim-Mathemacs joint workshop, Bielefeld, 10/2013
- Topdrim First Year Review Meeting, Bruxelles European Community, 10/2013
- Embolia polmonare acuta old & new Porto Novo, Ancona Italy. July 2013
- III scientific day Camerino Italy. June 2013
- CS2BIO'13 4th International Workshop on Interactions between Computer Science and Biology, Florence, 05/2013
- Ayasdi researcher meeting, Ayasdi Inc., Palo Alto (Ca), 03/2013
- II scientific day Camerino Italy. June 2012

Period Abroad for Collaborations

Rotes Phuse

- Applied Mathematics Group Seville Spain, 12/2018. Collaboration with Prof. Rocio Gonzalez-Diaz
- Applied Mathematics Group Seville Spain, 23/11/2016 03/12/2016. Collaboration with Prof. Rocio Gonzalez-Diaz
- Applied Mathematics Group Seville Spain, 9/11/2015 15/11/2015. Collaboration with Prof. Rocio Gonzalez-Diaz
- IGH/IMGT Group- Montpellier France, 5/10/2015 7/11/2015. Collaboration with Prof. Marie-Paule Lefranc and Prof. Sofia Kossida
- Saint Louis University, Saint Louis (MO) USA, 01/03/2014 01/04/2014. Collaboration with Prof. David Letscher
- Ayasdi Inc. Paolo Alto (CA) USA, 01/03/2013 30/03/2013. Collaboration with Dr. Damir Herman

Advanced Courses

- The (strange) world of Intellectual/Industrial property: how to make use of IP within scientific research. Held by Luisa Currado. School of Advanced Studies, University of Camerino. June-8,9-2015.
- Bibliometrics and research evaluation. Held by Chiara Faggiolani. School of Advanced Studies, University of Camerino. June-9-2015
- Business plan: how to handle the dream with numbers. Held by Cristiano Venturini. School of Advanced Studies, University of Camerino. June-10-2015
- SME and Internationalization: Strategies, mode of entry and new challenges.
 Held by Cristiano Venturini. School of Advanced Studies, University of Camerino, June-11-2015.

Personal interests

I attended theatre class and several courses at School of Chocolate organized by Perugina. I practice sports, e.g., hiking, biking and kayaking. Numerical controlled systems, such as automatic engraving machine.

