

Giovanni STILO

Academic Curriculum Vitae

Rome (Italy)

May, 2021

SHORT BIO

Giovanni Stilo is an Assistant Professor at University of L'Aquila. He received his Ph.D. from the University of L'Aquila (Italy) in April 2013. During his postdoctorate, in 2014, he was Visiting Researcher at Yahoo Labs Barcelona, Spain for 8 months.

His research interests fall into the broad area of data science, were in particular he became influential in the conception and development of temporal mining and machine learning algorithms, and semantic-oriented recommender systems. He has published in top-tier conferences and journals, such as AIIM, IJCAI, DMKD, JWS, COLI, TREC and PlosOne.

His work is centered on real-world problems that require large-scale data processing. Specifically, his current research interests include anomaly detection, computational biology, reinforcement learning, temporal analysis of social networks and social streams, as well as (social) web mining and (web) information filtering, while in the past also focused on information retrieval models, text clustering and automatic taxonomy generation.

Moreover, he has been involved in the organisation of top-tier and highly relevant international conferences (IEEE ICDM, ECIR, CIKM), and as editor of international journals and volumes (Springer's Information Retrieval Journal and LNCS volume).

PART I - GENERAL INFORMATION

FULL NAME: Giovanni STILO

SPOKEN LANGUAGES: Italian (mother tongue), English (full working proficiency)

PART II - EDUCATION

[APR' 2013] **Ph.D.** in COMPUTER SCIENCE, University of "L'Aquila"
Ph.D. Thesis: "*Techniques for an Unordered World*"
Advisor: Prof. Michele FLAMMINI

[OCT' 2008] **M.Sc.** in COMPUTER SCIENCE, "Tor Vergata" University of Rome
M.Sc. 110/110 *summa cum laude*
Thesis: "*Tecniche Efficienti di Information Retrieval per il Trattamento di documenti di Interesse Legale*" | Advisor: Prof. Giorgio GAMBOSI

[FEB' 2006] **B.Sc.** in COMPUTER SCIENCE, "Tor Vergata" University of Rome
B.Sc. 110/110 *summa cum laude*
Thesis: "*Approccio Euristicamente al Problema del Broadcast ad Energia minima su Reti Disomogenee*" | Advisor: Prof.ssa Miriam DI IANNI

PART III - APPOINTMENTS

- IIIA - [DEC'2018-PRESENT]
ACADEMIC POSITION: Assistant Professor (RTD-B art.24 c.3 l.A L. 30.12.2010)
INSTITUTION: Inf. Eng., Computer Sc. and Math. Dep., University of L'Aquila
AREA: Data Mining and Machine Learning
- [JUL'2016-DEC'2018]
POSITION: Assistant Professor (RTD-A art.24 c.3 l.A L. 30.12.2010)
INSTITUTION: Computer Science Dep., "Sapienza" University of Rome
AREA: Data Mining, Social Network Analysis and Social computing
- [2014-2016]
POSITION: Post-doctoral Research Fellow (Ass. di Ric. art.51c.6L.27.12.1997)
INSTITUTION: Computer Science Dep., "Sapienza" University of Rome
AREA: Data Mining, Social Network Analysis and Social computing
- [MAY'14-NOV'14]
POSITION: Short Term - Visiting Research Fellow
INSTITUTION: Yahoo Labs, Barcelona, Spain (Web Mining group)
AREA: Social Web Mining
- [2013]
POSITION: Short Term - Research Fellow
INSTITUTION: Computer Science Dep., "Sapienza" University of Rome
AREA: MultiJEDI Project
- [APR'12-DEC'12]
POSITION: Short Term - Research Fellow
INSTITUTION: Computer Science Dep., "Sapienza" University of Rome
AREA: Big Data Analysis e Data Mining
- [2010-2012]
POSITION: Teaching Assistant
INSTITUTION: Faculty of Mathematical, Physical and Natural Sciences,
"Tor Vergata" University of Rome
- IIIB - [2013-2015]
OTHER POSITION: Research contracts
INSTITUTION: "Pediatric Hospital Bambino Gesù"
AREA: Mining in e-Health related data
- [2009-2012]
POSITION: Applied Research Fellow
INSTITUTION: Nestor s.c.a.r.l. Laboratory
AREA: Researcher in the field of Information Retrieval and Document management
- [2007-2008]
POSITION: Project related contracts
INSTITUTION: Ministry of Justice
AREA: Evaluation of SIDIP and DIGIT projects

PART IV - TEACHING AND MENTORING EXPERIENCE

- COURSES TAUGHT AS A PROFESSOR
- Social Mining* (48h)
M.Sc. in Applied Data Science,
Department of Inf. Eng., Comp. Sc. and Math.,
University of L'Aquila
Years: 2020-2021

 - Reinforcement Learning (Module of the AI Course)* (12h)
M.Sc. in Computer Science,
Department of Inf. Eng., Comp. Sc. and Math.,
University of L'Aquila
Years: 2020-2021

 - Data Mining* (40h)
M.Sc. in Computer Science,
Department of Natural, Engineering, and Technology Sciences,
Invited by the Arab American University of Palestine
Years: Summer 2020

 - Social and Behavioural mining* (48h)
M.Sc. in Computer Science,
Department of Inf. Eng., Comp. Sc. and Math.,
University of L'Aquila
Years: 2019-2020

 - Networks Analysis and Mining* (28h)
M.Sc. in Computer Science,
Faculty of Math. and Comp. Science,
Invited by the University of Havana
Years: 2019-2020

 - Artificial Intelligence* (12h)
M.Sc. in Computer Science,
Department of Inf. Eng., Comp. Sc. and Math.,
University of L'Aquila
Years: 2019-2020

 - Networks* (48h)
M.Sc. in Applied Data Science,
Department of Inf. Eng., Comp. Sc. and Math.,
University of L'Aquila
Years: 2018-2019

 - Social And Behavioral Networks* (6 CFU)
M.Sc. in Data Science,
Faculty of Information Engineering, Informatics and Statistics,
"Sapienza" University of Rome
Years: 2016-2019

 - Web and Social Information Extraction* (2 CFU)
M.Sc. in Computer Science,
Faculty of Information Engineering, Informatics and Statistics,
"Sapienza" University of Rome

Years: 2017-2019

Foundations of Computer Science (32 h)

M.Sc. in Biology and human evolution,
Faculty of Mathematical, Physical and Natural Sciences,
“Tor Vergata” University of Rome
Years: 2011-2012

Foundations of Computer Science (32 h)

M.Sc. in Cell and Molecular Biology,
Faculty of Mathematical, Physical and Natural Sciences,
“Tor Vergata” University of Rome
Years: 2010-2011

Foundations of Computer Science (32 h)

M.Sc. in Evolutionary Biology and Ecology,
Faculty of Mathematical, Physical and Natural Sciences,
“Tor Vergata” University of Rome
Years: 2009-2010

COURSES TAUGHT
AS A ASSISTANT

Web and Social Information Extraction (16 h, Laboratory classes)

M.Sc. in Computer Science,
Faculty of Information Engineering, Informatics and Statistics,
“Sapienza” University of Rome
Years: 2013-2019

Programming Methodologies (8 h)

B.Sc. in Computer Science,
Faculty of Mathematical, Physical and Natural Sciences,
“Tor Vergata” University of Rome
Years: 2006-2008

PH.D.
MENTORING

HAMED SARVARI [Late 2021¹]

Ensembles Techniques for Outlier Detection

Ph.D. in Computer Science,
Department of Computer Science,
The Volgenau School of IT & Engineering,
George Mason University, Fairfax, Virginia, U.S.A
Co-Advised with Prof. Carlotta Domeniconi

BARDH PRENKAJ [Late 2021¹]

Solve the Student Dropout Problem and Applications

Ph.D. in Computer Science,
Faculty of Information Engineering, Informatics and Statistics,
“Sapienza” University of Rome
Co-Advised with Prof. Paola Velardi

LORENZO MADEDDU [Late 2021¹]

Machine Learning techniques in Networks Medicine

Ph.D. in Computer Science in Medicine,
Medical School Department,
“Sapienza” University of Rome
Co-Advised with Prof. Paola Velardi

¹Expected Graduation date

GIORGIA DI TOMMASO [Late 2019]
Recommender System for Everything
Ph.D. in Computer Science,
Faculty of Information Engineering, Informatics and Statistics,
“Sapienza” University of Rome
Co-Advised with Prof. Paola Velardi

JOSE CAMACHO COLLADOS [Early 2018]
*Semantic (Vector) Representations of Word Senses,
Concepts and Entities and their Applications*
Ph.D. in Computer Science,
Faculty of Information Engineering, Informatics and Statistics,
“Sapienza” University of Rome

THESIS
(CO-)ADVISING

LOAI BITAWI [Late 2021]
Density-based documents’ ranking model
M.Sc. in Data Science ,
Department of Natural, Engineering, and Technology Sciences,
Arab American University of Palestine

RABEE ALQASEM [Late 2021]
Reinforcement Learning-based approach for bike lanes’ designing
M.Sc. in Data Science ,
Department of Natural, Engineering, and Technology Sciences,
Arab American University of Palestine

GIORDANO D’ALOISIO [Mid 2021]
Approach to design Data Science Pipeline with High Quality
M.Sc. in Computer Science ,
Department of Inf. Eng., Comp. Sc. and Math.,
University of L’Aquila
Co-Advised with Prof. Antiniscia Di Marco

MANUEL DI PIETRO [Late 2019]
Solving the cold start problem using GAN in the Geomarketing context
M.Sc. in Computer Science ,
Department of Inf. Eng., Comp. Sc. and Math.,
University of L’Aquila

CECILIA MARTINEZ OLIVA [Early 2019]
Embeddings techniques for semantic clustering of a Twixonomy
M.Sc. in Data Science ,
Faculty of Information Engineering , Informatics and Statistics,
“Sapienza” University of Rome

GABRIELE AVELLINO [Early 2019]
Ranking of topics in a Large Scale System
M.Sc. in Data Science,
Faculty of Information Engineering, Informatics and Statistics,
“Sapienza” University of Rome

MATTEO URISELLI [Early 2019]
Predict the Future of Patients from the Electronic Health Records
M.Sc. in Computer Science,

Faculty of Information Engineering, Informatics and Statistics,
“Sapienza” University of Rome
Co-Advised with Prof. Paola Velardi

ANDREA LORINO [Late 2018]
The impact of the cold start problem in a semantic recommender system
M.Sc. in Computer Science,
Faculty of Information Engineering, Informatics and Statistics,
“Sapienza” University of Rome
Co-Advised with Prof. Paola Velardi

ANDREA LENZI [Late 2018]
Understanding patients health from social website signals
M.Sc. in Computer Science,
Faculty of Information Engineering, Informatics and Statistics,
“Sapienza” University of Rome
Co-Advised with Prof. Paola Velardi

BARDH PRENKAJ [Late 2018]
Time-Aware Topic Detection and Anomaly Classification in a Multi-Layer Network
M.Sc. in Computer Science,
Faculty of Information Engineering, Informatics and Statistics,
“Sapienza” University of Rome
Co-Advised with Prof. Paola Velardi

LORENZO MADEDDU [Late 2018]
Disease Prediction in Biological Networks
M.Sc. in Computer Science,
Faculty of Information Engineering, Informatics and Statistics,
“Sapienza” University of Rome
Co-Advised with Prof. Paola Velardi

CARLO SPATOCCO [Late 2017]
Continuity of perturbed principal eigenvectors in Perron-Frobenius theory
M.Sc. in Mathematics, Faculty of Mathematics,
“Sapienza” University of Rome
Co-Advised with Prof. Alessandro D’Andrea

PIERFABIO SANNA [Mid 2017]
A tool for the visualization of Semantic Users’ Interest
B.Sc. in Computer Science,
Faculty of Information Engineering, Informatics and Statistics,
“Sapienza” University of Rome
Co-Advised with Prof. Paola Velardi

VALENTINA PIZZO [Early 2017]
Analyzing Italian users’ Interests in Medical Domain
M.Sc. in Computer Science,
Faculty of Information Engineering, Informatics and Statistics,
“Sapienza” University of Rome
Co-Advised with Prof. Paola Velardi

MANUELA BENEDETTI [Early 2017]
Behaviors of Pregnant Women in On-Line Social Media

M.Sc. in Computer Science,
Faculty of Information Engineering, Informatics and Statistics,
“Sapienza” University of Rome
Co-Advised with Prof. Paola Velardi

BARDH PRENKAJ [Early 2017]
Automatic Information Extraction in News Media Domain
B.Sc. in Computer Science,
Faculty of Information Engineering, Informatics and Statistics,
“Sapienza” University of Rome
Co-Advised with Prof. Paola Velardi

GIORGIA DI TOMMASO [Oct. 2015]
*Design and Development of a Platform for Leadership Analysis
in Enterprise Social Networks*
M.Sc. in Computer Science,
Faculty of Information Engineering, Informatics and Statistics,
“Sapienza” University of Rome
Co-Advised with Prof. Paola Velardi

CLAUDIO RAUSO [Mar. 2015]
Geographic profiling of Twitter users
M.Sc. in Computer Science,
Faculty of Information Engineering, Informatics and Statistics,
“Sapienza” University of Rome
Co-Advised with Prof. Paola Velardi

GIULIO DE STEFANO [Jun. 2014]
Efficient Crawling Techniques on Online Community Networks
B.Sc. in Computer Science,
Faculty of Information Engineering, Informatics and Statistics,
“Sapienza” University of Rome
Co-Advised with Prof. Paola Velardi

INTERN
ADVISING

IVAN GUALANDRI [Mid. 2018]
A Visual Tool to allow Web Information Extraction
B.Sc. in Computer Science,
Faculty of Information Engineering, Informatics and Statistics,
“Sapienza” University of Rome

PART V - SOCIETY MEMBERSHIP, AWARDS AND HONORS

Honors	Abilitazione Scientifica Nazionale - Settore Concorsuale 01/B1 - II Fascia - Secondo Quadrimestre - Abilitato Dal 11/09/2019 al 11/09/2028.
Honors	Abilitazione Scientifica Nazionale - Settore Concorsuale 09/H1 - II Fascia - Secondo Quadrimestre - Dal 09/09/2019 al 09/09/2028.
Membership	Consiglio di Area Didattica [CAD] for the Degree of Computer Science of University of L'Aquila 2019/2021.
Membership	Consiglio di Area Didattica [CAD] for the Degree of Applied Data Science of University of L'Aquila 2018/2021.

Membership	Working group for the reshaping and evaluation of the Master Degree of Computer Science of University of L'Aquila 2020/2021.
Membership	Working group for the deepening of the CENSIS results - Master and Bachelor Degree of Computer Science of University of L'Aquila 2020/2021.
Membership	Working group for the evaluation of the students' academic path - Master Degree of Applied Data Science of University of L'Aquila 2020/2021.
Membership	Working group for the evaluation of the international students' admissions - Master Degree of Applied Data Science of University of L'Aquila 2020/2021.
Mentor	Academic mentor of the refugee student (Name Omitted for Privacy Concern) - UNICORE 2.0 - Master Degree of Applied Data Science of University of L'Aquila.
Membership	Evaluating group for the international students' scholarships - University of L'Aquila 2020/2021.
Membership	Evaluating group for the refugee students' scholarships - UNICORE 2.0 - University of L'Aquila 2020/2021.
Membership	Working group for the evaluation of the students participating at TOLC@CASA (August, September, November)- University of L'Aquila 2020/2021.
Membership	<i>Tutor of the first edition of course for lifelong learning/training for young incoming teachers</i> promoted by Gruppo di Lavoro Qualita' e Innovazione della Didattica (GdL QuID), "Sapienza" University of Rome.
Award	<i>"Fondo per le attivita' base di ricerca"</i> promoted by Consiglio Direttivo n.87 del 14 giugno 2017 dell' Agenzia Nazionale di Valutazione del sistema Universitario e della Ricerca. FOUNDED: â - 3.000,00, 2017
Membership	<i>Involved in the experimentation phase for lifelong learning/training for young incoming teachers</i> promoted by Gruppo di Lavoro Qualita' e Innovazione della Didattica (GdL QuID), "Sapienza" University of Rome.
Membership	In 2020/2021 he was <i>Part of the Advisory board of the 36th Ph.D. Program in Tecnologie Biomediche Innovative In Medicina Clinica</i> , Medical Dep., "Sapienza" University of Rome.
Membership	In 2019/2020 he was <i>Part of the Advisory board of the 35th Ph.D. Program in Tecnologie Biomediche Innovative In Medicina Clinica</i> , Medical Dep., "Sapienza" University of Rome.
Membership	In 2018/2019 he was <i>Part of the Advisory board of the 34th Ph.D. Program in Tecnologie Biomediche Innovative In Medicina Clinica</i> , Medical Dep., "Sapienza" University of Rome.
Membership	In 2017/2018 he was <i>Part of the Advisory board of the 33th Ph.D. Program in Tecnologie Biomediche Innovative In Medicina Clinica</i> , Medical Dep., "Sapienza" University of Rome.

Best Student Paper Awards	G. Di Tommaso, G. Stilo and P. Velardi, <i>Detecting Network Leaders in Enterprises</i> 2017 IEEE 21st International Conference on Computer Supported Cooperative Work in Design, 26 Apr - 28 Apr 2017, Wellington, New Zealand [27].
Membership	<i>Institute of Electrical and Electronics Engineers (IEEE)</i> . Full member (2016 - present).
Honor	Officially included by the Ministry of Cultural Heritage and Activities and Tourism, in the list of experts eligible to advice on “Development and management of Computer applications , Computer management of documents and processes and the application of innovative technologies for the public use of cataloging and photographic collections”. 2011-2013
Award	Degree Award announced by Confindustria and A.I.C.A. to promote best works in I.C.T. field of research, Milano, Italy. 2009.
TREC Challenge	Second position during the Text REtrieval Conference (TREC) Legal Track, organized by National Institute of Standards and Technology, Gaithersburg, Maryland, United States. TREC is the most important forum to compare challenging solutions in Information Retrieval since the past 16 years, 2008.

PART VI - FUNDING INFORMATION [GRANTS AS PI-PRINCIPAL INVESTIGATOR OR I-INVESTIGATOR]

TERRITORI APERTI (I)	<p>Territori Aperti: DOCUMENTATION, TRAINING AND RESEARCH CENTER FOR THE RECONSTRUCTION AND RECOVERY OF AFFECTED AREAS FROM NATURAL DISASTERS - This work is supported by Fondo Territori Lavoro e Conoscenza di Cgil, Cisl, Uil.</p> <p>DURATION: 17 December 2018 - 17 December 2021</p> <p>FOUNDED: € 1.800,00</p> <p>RESPONSIBILITIES: study and identifying Data Mining and machine Learning techniques that can be applied to the processes of reconstruction and development.</p>
DIGFORASP (I)	<p>DIGital FOREnsics: EVIDENCE ANALYSIS VIA INTELLIGENT SYSTEMS AND PRACTICES - This work is supported by The European Cooperation in Science and Technology - COST Action CA17124.</p> <p>https://www.cost.eu/actions/CA17124/</p> <p>DURATION: 1 February 2018 - 31 January 2021</p> <p>RESPONSIBILITIES: exploring the potential of the application of Artificial Intelligence and Automated Reasoning in the Digital Forensics field, and creating synergies between these fields.</p>
ELEXIS (I)	<p>ELEXIS: EUROPEAN LEXICOGRAPHIC INFRASTRUCTURE - This work is supported by e-Infrastructures H2020-EU.1.4.1.2.,</p> <p>https://cordis.europa.eu/project/rcn/213379_en.html</p> <p>DURATION: 1 February 2018 - 31 January 2022</p> <p>FOUNDED: € 4.999.967,50 (€ 453.750,00 to partner Sapienza)</p> <p>RESPONSIBILITIES: Definition of the metrics needed to compute analytics for words, senses, domains and other lexical-semantic information (including phrases, collocations, etc.) across the analyzed lexical resources.</p>
SERENA (I)	<p>SERENA: SEMANTIC RECOMMENDER FOR ALL - This work is supported by IBM faculty Award 2017.</p> <p>DURATION: 1 January 2017 - 31 December 2017</p>

FOUNDED: € 15.000,00 to Computer Science Department.

RESPONSIBILITIES: Definition and implementation of algorithms oriented to the extraction of the semantic information from the users' profiles.

- FIORDALISO (I)** **Fiordaliso:** ANALYSIS OF SOCIAL BEHAVIORS OF CO-WORKERS IN ONLINE ENTERPRISE SOCIAL NETWORKS. - This work is supported by Regione Lazio (Italy), under grant: POR. FESR. 2007/2013 CUP. F88C14000460007.
DURATION: 1 November 2014 - 31 October 2015
FOUNDED: € 150.000,00 to Computer Science Department.
RESPONSIBILITIES: Lead investigator of the work-package related to definition and creation of a social network analytics framework that extensively analyzes the social behaviors in ESNs as a function of gender, role, time, and competences of co-workers.
- GAME4BIO (I)** **Game4Bio:** SERIOUS GAMING FOR BIODIVERSITY PRESERVATION IN FOOD AND AGRICULTURE. - This work is supported by "Sapienza" University of Rome, under grant: Interdisciplinary Research Project 2015.
DURATION: 1 January 2015 - 31 December 2015
FOUNDED: € 22.000,00 to Computer Science Department.
RESPONSIBILITIES: Designing of a gamified storytelling component focused on a geo-referenced platform dedicated to the eno-gastronomic sector in the area of the via Francigena.
- WESOCIAL (I)** **WeSocial:** WOMEN AND SOCIAL LEADERSHIP. - This work is supported by "Sapienza" University of Rome, under grant: AWARDS Research Project 2014.
DURATION: 1 January 2014 - 31 December 2014
FOUNDED: € 53.000,00 to Computer Science Department.
RESPONSIBILITIES: Definition and implementation of a measure of informal leadership which draws on leadership models in organization science and on a computational model based on multiplex networks.
- HC4A (I)** **HC4A:** HOME CARE FOR ALL. - This work is supported by Regione Lazio (Italy), under grant: POR. FESR. 2007/2013 CUP. F81I14000020007.
DURATION: 1 January 2013 - 4 March 2014
FOUNDED: € 25.000,00 to Computer Science Department.
RESPONSIBILITIES: Development support for methodologies for semantic indexing, question answering and construction of ontologies in the sanitary field.

Technology Transfer

- G (PI)** Fast and Memory Efficient Graph Library for Graph Mining in Java. Manage Weighted Direct,/Undirect Graph also with weights on Vertices. Many algorithms ready to use as PageRank, HITS and many others. Concurrent Multithread algorithms configurable on demand. Giovanni Stilo is the founder of the **G** library.
<https://github.com/giovanni-stilo/G>
- UCRAWLER (PI)** Universal Crawler (uCrawler) is a Concurrent, Distributed, Highly Configurable, and Flexible Next Generation Crawler. **uCrawler** allows to define a specialized crawler directly through configuration files. Principal features are: web pages, rest services, extendable, concurrent, distributed, flexible, efficient.

Giovanni Stilo is the founder of the **uCrawler** echo-system.

<https://github.com/giovanni-stilo/uCrawler-Core>

TERRIER IR (I) Terrier is a highly flexible, efficient, and effective open source search engine developed at the School of Computing Science, University of Glasgow. Terrier is readily deployable on large-scale collections of documents. Terrier implements state-of-the-art indexing and retrieval functionalities, and provides an ideal platform for the rapid development and evaluation of large-scale retrieval applications. Giovanni Stilo has contributed identifying and solving several issues. <http://terrier.org/>

PART VII - RESEARCH ACTIVITIES

His research interests fall into the broad area of *data science*, with emphasis on *data mining* and *machine learning*. His work is centered on real-world problems that require *large-scale data* processing. Specifically, his current research is mainly devoted to *anomaly detection*, *temporal analysis of social networks* and *social streams*, as well as (social) web mining and (web) information filtering, while in the past he has also focused on information retrieval models, text clustering and automatic taxonomy generation. In detail, he focused on the following topics:

- Anomaly Detection, Event Detection , Event discovery, Topic detection, Topic clustering, Terminology clustering [23, 7, 8, 10, 27, 37, 39, 28, 12, 29, 32, 33, 15, 16]
- Users' Profiling, Information Extraction, Semantic categorization, Semantic recommender, Semantic web, Hierarchical Interest, Itemset Mining [4, 20, 21, 24, 8, 9, 37, 39, 13, 30, 31]
- Temporal Mining, Symbolic Aggregate Approximation, Temporal Text Mining, Hash-tags Temporal mining [3, 7, 10, 12, 28, 32, 33]
- Microblog analysis, Microblog mining, Twitter mining [8, 10, 37, 39, 38, 12, 14, 15, 32, 33, 34, 16]
- Social network analysis, Enterprise social networks, Women leadership, Informal leadership; [2, 19, 17, 9, 26, 27, 13, 29, 30, 31]
- bioinformatics, e-Health, Syndromic surveillance, Epidemiological surveillance, Predictability of health-related phenomena[5, 6, 18, 22, 15, 14, 34, 16]
- Processes Discovering, Processes Monitor, Processes Mining [41]

Each of this research activities has lead to at least one or more publications in top-tier conferences or journals.

International Collaborations

COLLABORATION AGREEMENT AND RESULTS **CLAIRE - Confederation of Laboratories for Artificial Intelligence Research in Europe** - International collaboration focused on: Bioinformatics (protein and molecular data analysis). The topic joins forces from AI, clinical and life-sciences experts working

on the analysis of complex and multi-sourced biomedical data integrating clinical evidence on COVID-19 with genomic and proteomic information, as well as molecular data. We are exploring data-driven AI methodologies and bioinformatics approaches covering network data analysis, machine learning and deep learning for graphs, predictive modelling, and feature selection of Omics data. <https://covid19.claire-ai.org/>

Intelligent Information Mining group, is a joint research group founded at the beginning of 2019 from the collaboration of three institutions: Sapienza university of Rome, University of L'Aquila and Unitelma. It is directed by Prof. Paola Velardi, Prof. Giovanni Stilo and Prof. Damiano Distanto its aim is to investigate, promote challenges and collaborations in the areas of Machine Learning, Semantics Technology, Temporal Mining, Social Media Analysis, Educational Data Mining and Recommender Systems.

Data Mining and Machine Learning Laboratory, led by Prof.ssa Carlotta Domeniconi of Department of Computer Science at George Mason University, Fairfax, Virginia, USA. The scope of the collaboration is oriented in research activities focused on anomaly detection, social network and social media mining, and multiplex networks. 01/01/2017 - ongoing. We published *Graph-based Selective Outlier Ensembles*[23] and we are collaborating on the paper entitled *A Configurable Methodology for Centrality Measures in Multiplex Networks with Cyclic Dependencies*.

Data Science and Big Data Analytics research group, coordinated by Dr. Ludovico Boratto - Eurecat Foundation, Barcellona, Spain. Collaboration activities focused on organisation of workshop and journal's special issue, and on research in the field of "social media for personalization and search technologies". 01/01/2016 - ongoing. Organised Workshops [BIAS'2020, SoMePeaAS '19, SIR'18, SoAPS '18, SERecSys '17, SoMePeaAS '17, SERecSys '16], Journal [SoMePeAS-IRJ] and a Volume [SoAPS-LNCS] have been organized during this collaboration. See at "Scientific Community Service" section for a detailed description of editorial activities and workshop organization.

Yahoo! Academic Research Program Agreement - Between Dr. Giovanni Stilo and Yahoo! Inc., 701 First Avenue Sunnyvale CA 94089 - Agreement focused on research activities in the field of Event detection and discovery in Yahoo! query logs. 15/11/2014 - 15/11/2015.

The outcome of this collaboration are the papers entitled *Importance of Unexpectedness: Discovering Buzzing Stories in Anomalous Temporal Graphs* [7] and *Identifying Buzzing Stories via Anomalous Temporal Subgraph Discovery* [28] that are in the field of the event/topic discovery.

Linguistic Computing Laboratory (LCL), led by Prof. Paola Velardi and Prof. Roberto Navigli, Rome, Italy. The scope of the collaboration is oriented in research activities focused on event discovery, users' profiling, semantic recommender system, temporal mining, e-Health and social network analysis. 1/05/2012 - ongoing. Several results were achieved during this collaboration. Here after are cited only the most important:[24, 8, 25, 9, 10, 26, 12, 30, 14, 15, 16].

VISITING

University of Havana, hosted by Prof. Alberto Fernandez Oliva, of the Faculty of Math. and Comp. Science Havana, Cuba. Collaboration focused on Topic detection and discovery in news logs. 13/12/2019 - 20/01/2020

Yahoo! Research Labs, led by Prof. Ricardo Baeza-Yates, Barcelona, Spain. Collaboration focused on Event detection and discovery in query logs. 19/05/2014 - 18/10/2014

Scientific Community Service

EDITORIAL ACTIVITY

[**ECML/PKDD**] guest editorial board of the ECML/PKDD 2020/2021 journal track.

[**BIAS-CCIS**] Conference proceedings on *Bias and Social Aspects in Search and Recommendation*, published by Springer in the series Communications in Computer and Information Science (**CCIS**), volume 1245, 2020, edited with with Dr. Ludovico Boratto, Dr. Stefano Faralli, and Mirko Marras.

[**BIAS-IPM**] Ongoing Special Issue on *Algorithmic Bias and Fairness in Search and Recommendation*, will be published by Elsevier in Information Processing Management Journal (**IPM**), edited with with Dr. Ludovico Boratto, Dr. Stefano Faralli, and Mirko Marras.

[**ECML/PKDD**] guest editorial board of the ECML/PKDD 2019/2020 journal track.

[**SoAPS-LNCS**] Volume on *Social Aspects in Personalization and Search*, published by Springer in the series Lecture Notes in Computer Science (**LNCS**), editor with Dr. Ludovico Boratto. **Accepted by LNCS and will appear in Autumn 2019**

[**SoMePeAS-IRJ**] Special Issue on *Social Media for Personalization And Search* of the Information Retrieval Journals (Springer), guest editor with Dr. Ludovico Boratto and Dr. Andreas Kaltenbrunner. Volume 22, Issue 1-2, April 2019,
<https://link.springer.com/journal/10791/22/1/page/1>

[**SoMePeAS-CEUR**] *Proceedings of the Workshop on Social Media for Personalization and Search* co-located with 39th European Conference on Information Retrieval (ECIR 2017), editor with Dr. Ludovico Boratto and Dr. Andreas Kaltenbrunner. 2017
<http://ceur-ws.org/Vol-1840/>

WORKSHOP AND TRACKS²

[**BIAS '20**] Co-Chair of *International Workshop on Algorithmic Bias in Search and Recommendation*, (BIAS '20), with Dr. Ludovico Boratto, Dr. Stefano Faralli, and Mirko Marras, hosted by *42nd European Conference on Information Retrieval (ECIR 2020)*, 14 April 2020, Lisbon, Portugal
<http://bias.disim.univaq.it/>

[**KDD '20**] Chair of *Research Track on Autoencoders*, (KDD '20), of the *26th ACM SIGKDD Conference on Knowledge Discovery and Data*

ORGANIZATION

Mining, 25th August 2020, San Diego, U.S.A.
<https://www.kdd.org/kdd2020/>

[**ICDM '20**] Co-Chair of *Research Track on Outlier and Anomaly Detection*, (ICDM '20), of the *20th IEEE International Conference on Data Mining*, 20th November 2020, Sorrento, Italy
<http://icdm2020.bigke.org/>

[**Coding Conscious Cities '19**] Co-Chair of *Coding Conscious Cities - Interdisciplinary Research Tracks*, (Conscious '19), with Dr. Itai Palti, Natalia Olszewska, Eleonora Velluto, hosted by *ACM Celebration of Women in Computing - womENCourage 2019*, 17 September 2019, Rome, Italy
<https://womencourage.acm.org/2019/interdisciplinary-research-tracks/>

[**SoMePeaAS '19**] Co-Chair of *SoMePeAS: Workshop on Social Media for Personalization And Search*, (SoMePeaAS '19), with Dr. Ludovico Boratto, hosted by *European Conference on Information Retrieval (ECIR)*, 14 April 2019, Cologne, Germany
<http://somepeas.di.uniroma1.it/somepeas-ws2019.html>

[**SIR '18**] Co-Chair of *SIR: Workshop on Social Interaction-based Recommendation*, (SIR '18), with Dr. L. Boratto, Dr. S. Faralli and Dr. C. Morbidoni, hosted by *International Conference on Information and Knowledge Management (CIKM)*, 22 October 2018, Turin, Italy
<http://sir.di.uniroma1.it/>

[**SoAPS '18**] Co-Chair of *SoAPS: Workshop on Social Aspects in Personalization and Search*, (SoAPS '18), with Dr. Ludovico Boratto, hosted by *European Conference on Information Retrieval (ECIR)*, 26 March 2018, Grenoble, France
<http://soaps.di.uniroma1.it/>

[**SERecSys '17**] Co-Chair of *SERecSys: Second Workshop on Semantics-Enabled Recommender Systems*, (SERecSys '17), with Dr. Ludovico Boratto and Prof. Salvatore Carta, hosted by *IEEE International Conference on Data Mining (ICDM)*, 8 November 2017, New Orleans, (USA)
<http://serecsys.di.uniroma1.it>

[**SoMePeaAS '17**] Co-Chair of *SoMePeAS: Workshop on Social Media for Personalization And Search*, (SoMePeaAS '17), with Dr. Ludovico Boratto and Dr. Andreas Kaltenbrunner, hosted by *European Conference on Information Retrieval (ECIR)*, 9 April 2017, Aberdeen, Scotland (UK)
<http://somepeas.di.uniroma1.it/somepeas-ws2017.html>

²Note that all these workshops/tracks are organized in the context of top rated conferences in the field, and they are subject to a peer-review of the workshop proposal.

[**SERecSys '16**] Co-Chair of *SERecSys: Workshop on Semantics-Enabled Recommender Systems*, (SERecSys '16), with Dr. Ludovico Boratto and Prof. Salvatore Carta, hosted by *IEEE International Conference on Data Mining (ICDM)*, 12 December 2016, Barcelona (Spain)
<http://serecsys.di.uniroma1.it/serecsys2016.html>

INVITED TALKS

Task Force on AI COVID-19: Results and next steps, 15th of July 2020, Worldwide Webinar organised by the CLAIRe - Confederation of Laboratories of Artificial Intelligence Research in Europe. [LINK](#)

Challenges and Solutions to the Student Dropout Prediction Problem in Online Courses 19th October 2020, Tutorial at *29th ACM International Conference On Information and Knowledge Management, (CIKM '20)*, October 19 - 23, 2020, Galway - Ireland

Tailoring Centrality Measures in Multiplex Networks with Cyclic Dependencies, 18 November 2019,
George Mason University, Department of Computer Science, Fairfax, USA.

Time Makes Sense, 6 November 2018,
Gran Sasso Science Institute, L'Aquila, Italy.

Centrality Measures in Multiplex Networks with Cyclic Dependencies, 23 July 2018,
EURECAT Labs, Barcellona, Spain.

Capturing users' information and communication needs for the press of-ficers., 7 June 2017,
EURECAT Labs, Barcellona, Spain.

Time Makes Sense - Yahoo Labs, Barcelona, Spain, June 2014
<https://tinyurl.com/yb33rlrr>

JOURNALS
REVIEWING

TKDD: ACM Transactions on Knowledge Discovery from Data, (**TKDD**),
Association for Computing Machinery Press

ACM Transactions on Intelligent Systems and Technology, (**TIST**),
Association for Computing Machinery Press

IEEE Transactions on Knowledge and Data Engineering, (**TKDE**),
Institute of Electrical and Electronics Engineers Press

Data Mining and Knowledge Discovery, (**DAMI**), Springer Verlag

Artificial Intelligence, An International Journal, (**AI**), Elsevier B.V.

Knowledge and Information Systems, An International Journal, (**KAIS**),
Springer Verlag

Artificial Intelligence in Medicine, (**AIIM**), Elsevier B.V.

Applied Network Science, (**ANS**), Springer Verlag.

PROGRAM
COMMITTEES

European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases, (ECML-PKDD '20), September 14 - 18, 2020, Online

International Joint Conference on Artificial Intelligence, (IJCAI '20),
January 7 - 15, 2021, Yokohama, Japan

20th IEEE International Conference on Data Mining, (ICDM '20),
November 17 - 20, 2020, Sorrento, Italy

ACM SIGKDD Conference on Knowledge Discovery and Data Mining, (KDD '20), August 23 - 27, 2020, San Diego - USA

AAAI Conference on Artificial Intelligence, (AAAI '20), February 7 - 12, 2020, New York, USA

European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases, (ECML-PKDD '19), September 16 - 20, 2019, Wurzburg, Germany

International Joint Conference on Artificial Intelligence, (IJCAI '19), August 10 - 16, 2019, Macao, China

ACM SIGKDD Conference on Knowledge Discovery and Data Mining, (KDD '19), August 4 - 8, 2019, Anchorage, Alaska - USA

AAAI Conference on Artificial Intelligence, (AAAI '19), January 27 - February 1, 2019, Honolulu, Hawaii, USA

IEEE International Conference on Data Mining (ICDM), (ICDM '18), November 17 -20, 2018, Singapore

European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases, (ECML-PKDD '18), September 10 - 14, 2018, Dublin, Ireland

ACM SIGKDD Conference on Knowledge Discovery and Data Mining, (KDD '18), August 19 - 23, 2018, London, United Kingdom

SIAM International Conference on DATA MINING , (SDM '18), November 3 - 5, 2018, San Diego, California, (USA)

IEEE International Conference on Data Mining (ICDM), (ICDM '17), November 18 -21, 2017, New Orleans, Louisiana, (USA)

ACM SIGCHI Symposium on Engineering Interactive Computing Systems: 2nd Workshop on Engineering Computer-Human Interaction in Recommender Systems (EnCHIReS 2017), (SIGCHI '17), 26-29 June, 2017 (Lisbon, Portugal)

ACM SIGKDD Conference on Knowledge Discovery and Data Mining, (KDD '17), August 13 - 17, 2017, Halifax, Nova Scotia - Canada

IEEE BigData Congress 2016 5th IEEE International Congress on Big Data, (Big Data '16), June 27 - July 2, 2016, San Francisco, USA

IEEE BigData Congress 2015 4th International Congress on Big Data, (Big Data '15), June 27 - July 2, 2015, New York, USA

ACM Conference On Online Social Networks, (COSN '14), October 1-2, 2014, Dublin, Ireland

Conferenza Italiana di Linguistica Computazionale, (CLIC '14), Dicembre 9-10, 2014, Pisa, Italy

CONFERENCE
PARTICIPATION

20th IEEE International Conference on Data Mining, (**ICDM '20**), November 17 - 20, 2020, Sorrento, Italy

ACM SIGKDD Conference on Knowledge Discovery and Data Mining, (**KDD '20**), August 23 - 27, 2020, San Diego - USA

29th ACM International Conference On Information and Knowledge Management, (**CIKM '20**), October 19 - 23, 2020, Galway - Ireland

The 34th Annual ACM Symposium on Applied Computing (**SAC-2019**), April 8 - 12, Limassol, Cyprus 2019. Oral presentation of [23], and chairing the *Data Mining Session n°2*.

The 5th IEEE International Conference on Data Science and Advanced Analytics (**DSAA-2018**), 1-4 October 2018, Turin, Italy. Presents a tutorial on *Data Sources and Techniques to Mine Human Mobility Patterns*

International Conference on Information and Knowledge Management (**CIKM-2018**), 22 October 2018, Turin, Italy. Co-Chairing SIR Workshop.

40th European Conference on Information Retrieval (**ECIR-2018**), March 26-29 2018, Grenoble, France. Co-Chairing SoAPS Workshop.

IEEE International Conference on Data Mining series (**ICDM-2017**), 8 November 2017, New Orleans, (USA). Co-Chairing SERecSys Workshop.

The 11th International AAI Conference On Web And Social Media (**ICWSM-17**), May 15-18, 2017, Montreal, Canada. Oral presentation of [26]

39th European Conference on Information Retrieval (**ECIR-2017**), April 9-13 2017, Aberdeen, Scotland UK. Co-Chairing SoMePeaAS Workshop.

IEEE International Conference on Data Mining series (**ICDM-2016**), 12 December 2016, Barcelona, Spain. Co-Chairing SERecSys Workshop.

24th International Conference on Artificial Intelligence, (**IJCAI '15**), July 25-31, Buenos Aires, Argentina, 2015. Oral presentation of [30]

Workshop: Wikipedia, a Social Pedia: Research Challenges and Opportunities (**ICWSM '15**), May 26-29, Oxford, UK 2015. Oral presentation of [40].

24th International World Wide Web Conference (**WWW '15**), May 18-22, Florence, Italy, 2015.

Knowledge Engineering and Knowledge Management (**EKAW '14**), November 24-28, Linköping, Sweden, 2014. Oral presentation of [32].

The 2014 IEEE/WIC/ACM International Conference on Web Intelligence (**WIC '14**), August 11â 14, Warsaw, Poland, 2014. Oral presentation of [33].

Brain Informatics and Health (**BIH '14**), August 11â 14, Warsaw, Poland, 2014. Oral presentation of [\[34\]](#).

17th Text REtrieval Conference (**TREC '08**), National Institute of Standards and Technology (NIST), November 18-21, Gaithersburg, Maryland, USA, 2008. Oral presentation of [\[36\]](#).

Business Information Systems Workshops, (**BIS '09**) International Workshops, April 27-29, Poznan, Poland, 2009. Oral presentation of [\[42\]](#).

PART VIII - SELECTED PUBLICATIONS

BOOK CHAPTERS

- [1] M. Iannotta, M. Gatti, G. Stilo
Leveraging the enterprise social network for the emergence of women's leadership.
In Canonico, P., Consiglio, S., Mangia, G., Martinez, M., Mercurio, R., Moschera, L. (eds), "Organizing in the shadow of power"
ISBN 978-88-98-85428-8, pp. 505-526, Studi MOA (2018). Collana di Management e Organizzazione Aziendale.
Available also in e-format on amazon: <https://tinyurl.com/yas45d9z>

JOURNALS

- [2] G. Di Tommaso, M. Gatti, M. Iannotta, A. Mehra, G. Stilo, P. Velardi. Gender, rank, and social networks on an enterprise social media platform. *Social Networks (SN)*, V.62, P.58-67, 2020 (DOI: <https://doi.org/10.1016/j.socnet.2020.02.007>).
Journal IF: **2.376**
- [3] B. Prenkaj, P. Velardi, G. Stilo, D. Distanto, and S. Faralli
A Survey of Machine Learning Approaches for Student Dropout Prediction in Online Courses. *ACM Comput. Surv. (CSUR)*, 53, 3, Article 57 (June 2020), 34 pages (DOI: <https://doi.org/10.1145/3388792>).
Journal IF: **7.990**
- [4] M. A. Prado-Romero, A. Coto-Santesteban, A. Celi, and G. Stilo
A time-sensitive model to predict topic popularity in news providers
Intelligent Data Analysis (IDA), vol. 24, no. S1, pp. 123-140, IOS Press 2020 (DOI: <https://doi.org/10.3233/IDA-200012>).
Journal IF: **1.32**
- [5] L. Madeddu, G. Stilo and P. Velardi
A feature-learning-based method for the disease-gene prediction problem. *International Journal of Data Mining and Bioinformatics (IJDMB)*, Inderscience Publishers (IEL) August 2020, Volume 24, Issue 1, pp 16-37
(DOI: <https://doi.org/10.1504/IJDMB.2020.109502>).
Journal IF: **0.772**
- [6] A. Lenzi, M. Maranghi, G. Stilo, P. Velardi
The social phenotype: Extracting a patient-centered perspective of diabetes from health-related blogs
Artificial Intelligence in Medicine (AIIM), V. 101, ELSEVIER 2019 (DOI: <https://doi.org/10.1016/j.artmed.2019.101727>).
Journal IF: **4.383**
- [7] F. Bonchi and I. Bordino and F. Gullo and G. Stilo
Importance of Unexpectedness: Discovering Buzzing Stories in Anomalous Temporal Graphs
Web Intelligence Journal (WIJ), vol. 17, no. 3, pp. 177-198, IOS

Press 2019 (DOI: <https://doi.org/10.3233/WEB-190412>).
Journal IF (SJR): **0.63**

- [8] A. Cucchiarelli and C. Morbidoni and G. Stilo and P. Velardi
A Topic Recommender for Journalists
Information Retrieval Journal (IRJ), Springer April 2019, Volume 22, Issue 12, pp 4?31
(DOI: <https://doi.org/10.1007/s10791-018-9333-2>).
Journal IF: **2.209**
- [9] S. Faralli, G. Stilo and P. Velardi
Automatic Acquisition of a Taxonomy of Microblogs Users' Interests.
Web Semantics: Science, Services and Agents on the World Wide Web (JWS), V. 45, I. 1, p. 23-40, ELSEVIER 2017 (DOI: <https://doi.org/10.1016/j.websem.2017.05.004>).
Journal IF: **2.238**
- [10] G. Stilo, P. Velardi
Hashtag Sense Clustering based on Temporal Similarity.
Computational Linguistics (COLI), V. 43, I. 1, p. 181-200, MIT Press Journals, March 2017 (DOI: http://dx.doi.org/10.1162/COLI_a_00277).
Journal IF: **2.510**
- [11] Stilo, G., Basagni, S., Gesualdo, F., Velardi, P., Tozzi, A.E., et Al.
Results from the centers for disease control and prevention's predict the 2013-2014 Influenza Season Challenge
(2016) *BMC Infectious Diseases*, 16 (1), art. no. 357. (DOI: <http://dx.doi.org/10.1186/s12879-016-1669-x>).
- [12] G. Stilo, P. Velardi
Efficient temporal mining of micro-blog texts and its application to event discovery.
Data Mining and Knowledge Discovery (DMKD), V. 30, I. 2, p. 372-402, Springer US, March 2016 (DOI: <http://dx.doi.org/10.1007/s10618-015-0412-3>).
Journal IF: **3.644**
- [13] S. Faralli, G. Stilo, P. Velardi
Recommendation of microblog users based on hierarchical interest profiles.
Social Network Analysis and Mining (SNAM), V. 5 p. 1-23, Springer Vienna 2015 (DOI: <http://dx.doi.org/10.1007/s13278-015-0264-2>).
Journal IF (SJR): **2.97**
- [14] F. Gesualdo, G. Stilo, A. D'Ambrosio, E. Carloni, E. Pandolfi, P. Velardi, A. Fiocchi, A. E. Tozzi
Can Twitter Be a Source of Information on Allergy? Correlation

of Pollen Counts with Tweets Reporting Symptoms of Allergic Rhinconjunctivitis and Names of Antihistamine Drugs.
PloS one (**PloS one**'15), July 21, 2015 (DOI:
<http://dx.doi.org/10.1371/journal.pone.0133706>).
Journal IF: **2.740**

- [15] P. Velardi, G. Stilo, A. E. Tozzi, F. Gesualdo
Twitter mining for fine-grained syndromic surveillance.
Artificial Intelligence in Medicine (AIMM), V. 61 I.3 p. 153â 163, ELSEVIER 2014 (DOI:
<http://dx.doi.org/10.1016/j.artmed.2014.01.002>).
Journal IF: **4.383**
- [16] F. Gesualdo, G. Stilo, E. Agricola, M. V. Gonfiantini, E. Pandolfi,
P. Velardi, A. E. Tozzi
Influenza-Like Illness Surveillance on Twitter through Automated
Learning of Naive Language.
PloS one (**PloS one**'13), December 4, 2013 (DOI:
<http://dx.doi.org/10.1371/journal.pone.0082489>).
Journal IF: **2.740**

CONFERENCES

- [17] G. Stilo, C. Spatocco, A. D'Andrea, C. Domeniconi and L. Boratto
A Configurable Methodology for Centrality Measures in Multiplex
Networks with Cyclic Dependencies Submitted
- [18] L. Madeddu, G. Stilo, P. Velardi
Predicting disease genes for complex diseases using random
watcher-walker. In *Proceedings of the 35th Annual ACM Symposi-
um on Applied Computing (SAC'20)*, Association for Computing
Machinery, 2020, p.458–465.
- [19] Boratto L., Marras M., Faralli S., Stilo G.
International Workshop on Algorithmic Bias in Search and Rec-
ommendation (Bias 2020). In *Advances in Information Retrieval.
(ECIR'20)*. Lecture Notes in Computer Science, vol 12036.
Springer, p.637–640.
- [20] B. Prenkaj, G. Stilo, L. Madeddu
Challenges and Solutions to the Student Dropout Prediction
Problem in Online Courses. In *Proceedings of the 29th ACM
International Conference on Information Knowledge Management
(CIKM'20)*, Association for Computing Machinery, 2020, p.3513–
3514.
- [21] M. A. Prado-Romero, A. Celi, G. Stilo and A. Coto
TSTM: A Model to Predict Topics' Popularity in News Providers
In *Progress in Pattern Recognition, Image Analysis, Computer
Vision, and Applications (CIARP'19)*, Springer International
Publishing, 2019, p.96-106.

- [22] L. Madeddu, G. Stilo, P. Velardi
Predicting Disease Genes Using Connectivity and Functional Features *IEEE International Conference on Bioinformatics and Biomedicine (BIBM'19)*, IEEE, 2019, p.458-465.
- [23] H.Sarvari, C. Domeniconi and G. Stilo
Graph-based Selective Outlier Ensembles In *Proceedings of the 34th Annual ACM Symposium on Applied Computing (SAC'19)*, ACM Press, April 8 - 12, Limassol, Cyprus 2019.
- [24] G. Di Tommaso, S. Faralli, G. Stilo and P. Velardi
Wiki-MID: a very large Multi-domain Interests Dataset of Twitter users with mappings to Wikipedia.
In *Proceedings of the 17th International Semantic Web Conference (ISWC'18)*, Springer, October 8 - 12, Monterey, California 2018.
- [25] A. Cucchiarelli and C. Morbidoni and G. Stilo and P. Velardi
What to Write and Why: a Recommender for News Media.
In *Proceedings of the 33th Annual ACM Symposium on Applied Computing (SAC'18)*, ACM Press, April 9 - 13, Pau, France 2018.
- [26] G. Di Tommaso, G. Stilo and P. Velardi
A Gendered Analysis of Leadership in Enterprise Social Networks.
In *Eleventh International AAI Conference on Web and Social Media (ICWSM)*, AAAI Press, Montreal, CAN 2017 (PDF: <https://tinyurl.com/y7blza9r>).
- [27] G. Di Tommaso, G. Stilo and P. Velardi
Detecting Network Leaders in Enterprises. In *Proceeding 2017 IEEE 21st International Conference on Computer Supported Cooperative Work in Design (CSCWD)*, p. 275-280, IEEE Computer Society Wellington, New Zealand, 2017 (DOI: <http://10.1109/CSCWD.2017.8066707>).
- [28] F. Bonchi, I. Bordino, F. Gullo and G. Stilo
Identifying Buzzing Stories via Anomalous Temporal Subgraph Discovery. In *Proceeding 2016 IEEE/WIC/ACM International Conference on Web Intelligence (WI), Omaha, NE, 2016 (WIC)*, p. 161-168, IEEE Computer Society Washington, DC, USA, 2016 (DOI: <https://doi.org/10.1109/WI.2016.0032>).
- [29] G. Di Tommaso, G. Stilo, P. Velardi
Women leadership in enterprise social networks, A SNA toolkit to foster the emergence of informal leaders in organizations.
In *Information Society (i-Society), 2015 International Conference on (i-Society)*, p. 73-78, IEEE London 2015 (DOI: <http://dx.doi.org/10.1109/i-Society.2015.7366862>).
- [30] S. Faralli, G. Stilo, P. Velardi
Large scale homophily analysis in twitter using a twixonomy. In

Proceedings of the 24th International Conference on Artificial Intelligence), 2015 IEEE International Congress on (IJCAI), p. 2334-2340, AAAI Press, Buenos Aires, Argentina 2015 (PDF: <http://ijcai.org/papers15/Papers/IJCAI15-330.pdf>).

- [31] S. Faralli, G. Stilo, P. Velardi
A Semantic Recommender for Micro-blog Users. In *Big Data (BigData Congress), 2015 IEEE International Congress on (Big-Data Congress)*, p. 55-62, IEEE New York, NY 2015 (DOI: <http://dx.doi.org/10.1109/BigDataCongress.2015.18>).
- [32] G. Stilo, P. Velardi
Temporal Semantics: Time-Varying Hashtag Sense Clustering. In *Knowledge Engineering and Knowledge Management (EKAW)*, V. 8876 p. 563-578, Springer International Publishing, 2014 (DOI: http://dx.doi.org/10.1007/978-3-319-13704-9_42).
- [33] G. Stilo, P. Velardi
Time Makes Sense: Event Discovery in Twitter Using Temporal Similarity. In *Proceeding WI-IAT '14 Proceedings of the 2014 IEEE/WIC/ACM International Joint Conferences on Web Intelligence (WI) and Intelligent Agent Technologies (IAT) (WIC)*, V. 2 p. 186-193, IEEE Computer Society Washington, DC, USA, 2014 (DOI: <http://dx.doi.org/10.1109/WI-IAT.2014.97>).
- [34] G. Stilo, P. Velardi, A. E. Tozzi, F. Gesualdo
Predicting Flu Epidemics Using Twitter and Historical Data. In *Brain Informatics and Health (BIH)*, V. 8609 p. 164-177, Springer International Publishing, Warsaw, Poland, 2014 (DOI: http://dx.doi.org/10.1007/978-3-319-09891-3_16).
- [35] G. Stilo, M. De Vincenzi, A. E. Tozzi, P. Velardi
Automated learning of everyday patients' language for medical blogs analytics. In *Recent Advances in Natural Language Processing (RANLP)*, p. 640-648, Association for Computational Linguistics, Hissar, Bulgaria 2013 (PDF: <http://www.aclweb.org/anthology/R13-1084>).
- [36] G. Amati, M. Bianchi, A. Celi, M. Draoli, G. Gambosi, G. Stilo
CNIPA, FUB and University of Rome â Tor Vergataâ at TREC 2008 Legal Track In *Proceedings of the 17th Text REtrieval Conference (TREC 2008) (TREC)*, National Institute of Standards and Technology (NIST), Gaithersburg (Maryland - USA), 2008 (PDF: <http://trec.nist.gov/pubs/trec17/papers/cnipa.legal.pdf>).

WORKSHOPS

- [37] A. Cucchiarelli, C. Morbidoni, G. Stilo, P. Velardi
What to Write? A topic recommender for journalists. In *Proceedings of the 2017 EMNLP Workshop: Natural Language Processing meets Journalism. (ECIR)*, ACL, Copenhagen, Denmark 2017

(PDF: <https://tinyurl.com/yahbsdss>).

- [38] Di Tommaso, G. and Stilo, G.
Twixonomy visualization interface: How to wander around user preferences. In *2nd Workshop on Engineering Computer-Human Interaction in Recommender Systems (EnCHIReS)*, ACL, Lisbon; Portugal; 26 June 2017.
- [39] G. Stilo, C. Morbidoni, A. Cucchiarelli, P. Velardi
Capturing usersâ€™ information and communication needs for the press officers. In *ECIR 2017 - European Conference in Information Retrieval; Workshop: Workshop on Social Media for Personalization and Search (ECIR)*, Aberdeen, UK 2017 (PDF: <https://tinyurl.com/ybo2tbpy>).
- [40] S. Faralli, G. Stilo, P. Velardi
What Women Like: A Gendered Analysis of Twitter Users' Interests based on a Twixonomy. In *Ninth International AAAI Conference on Web and Social Media; Workshop: Wikipedia, a Social Pedia: Research Challenges and Opportunities (ICWSM)*, AAAI Press, Oxford, UK 2015 (PDF: <http://tinyurl.com/jap5zmq>).
- [41] W. v. d. Aalst, G. Stilo, and 68 more
Process Mining Manifesto. In *Business Process Management Workshops (BPM)*, V. 99 p. 169-194, Springer Berlin Heidelberg 2011 (DOI: http://dx.doi.org/10.1007/978-3-642-28108-2_19).
- [42] M. Bianchi, M. Draoli, G. Gambosi, G. Stilo
A Support System for the Analysis and the Management of Complex Ruling Documents. In *Business Information Systems Workshops (BIS)*, V. 37 p. 292-303, Springer Berlin Heidelberg 2009 (DOI: http://dx.doi.org/10.1007/978-3-642-03424-4_35).

Rome (Italy), May, 2021

— *Giovanni Stilo* —