CURRICULUM VITAE

LUDOVICA SEGNERI

PERSONAL DATA

Phone:
E-mail:
Address:

EDUCATION

Master of Science Degree

I graduated on 19 October 2020 in Management Engineering at the University of Rome Tor Vergata, with a final mark of 110/110 *cum laude*. I presented my final dissertation entitled "Competency Evaluation Model in Supply Chain Management & Operations Management"; with supervisor Professor M.M. Schiraldi.

Bachelor of Science Degree

I graduated on 29 October 2018 in Management Engineering at the University of Rome Tor Vergata. I discussed my final dissertation entitled "Methodology for University Exams Structuring: definition of a model based on self-evaluation and penalization"; with supervisor Professor M.M. Schiraldi.

Erasmus +	I spent four months in Spain for the Erasmus + program (February 2019-June 2019) and took Spanish exams at the University of Malaga.
Diploma	I earned Scientific Bilingual (English-Spanish) High School Diploma in July 2014 at the Scientific High School "F. Severi" in Frosinone, with a final mark of 88/100.

LANGUAGES

- Italian: Mother tongue
- English: B1 level
- Spanish: C1 level

IT SKILLS

- Excellent knowledge of the Microsoft Office programs: Excel, Word, PowerPoint.
- Excellent knowledge of the main software packages for Social Network Analysis: Pajek, Condor, Gephi.
- Excellent knowledge of the main software packages for Text Mining: SBS BI app, Context.
- Proficient knowledge of the Social Media Analytics platforms: Talkwalker, Brandwatch, SBS BI app.
- Intermediate competence in Statistical software: SPSS, Stata.
- Basic knowledge of programming languages: R and Python.
- Basic competence in Adobe software: Photoshop.

INSTITUTIONAL ACTIVITY

Joint Committee Member of Enterprise Engineering Department -University of Roma Tor Vergata

From October 2019 to October 2020, I was a student representative on the Joint Committee at the University of Rome Tor Vergata. I drafted the report verifying the documentation proposed by the QA Committee for the evaluation of the Bachelor and Master of Science courses in Management Engineering and Computer Science.

Ph.D. student representative on Academic Senate of Industrial and Information Engineering - University of Perugia

Since November 2021, I have been a member of the student representation of Ph.D. students in Industrial and Information Engineering at the University of Perugia.

ACADEMIC WORK

Ph.D. fellowship-University of Perugia

Since November 2021, I am a Ph.D. student in Industrial and Information Engineering at the University of Perugia. My research project aims to improve managerial decision-making in organizations by testing new organizational and communication strategies, tools, and work practices for better interactions of customers and employees, ultimately affecting business performance. This three-year project aims to extend the research on the advantages of combining social network analysis, machine learning, and text mining for business intelligence. We aim to use these methodologies to uncover the unconscious social signals that complement employees' and customers' conscious language and behavior - to understand their intentions, goals, and values.

Post degree fellowship - University of Perugia

Since February 2021, I have been working with Prof. Fronzetti Colladon and the Environmental Application Physics Lab (EAP Lab) research group in the Department of Engineering of the University of Perugia. My research work is based on implementing statistical models' techniques, social network analysis, and text mining to evaluate human behaviors concerning the adoption of innovative technologies for energy savings in buildings. Applying these techniques also allows for optimizing workspaces to achieve increased performance and improved comfort. Finally, the research focuses on economic and social analysis to facilitate the energy transition.

DIDACTIC WORK

Cultore della Materia

Since December 2021, I have been conferred the title of "Cultore della Materia" by the Engineering Department Board for the bachelor's degree Course of Economic Institutions (Academic Discipline ING-IND/35) and the teaching of Business Management and Analytics (Academic Discipline ING-IND/35) in the Master's course in Mechanical Engineering at the University of Perugia.

- In April 2022, I gave 9 hours of lectures at the Economic Institutions course (Academic Discipline ING-IND/35) for the bachelor's degree in Mechanical Engineering at the University of Perugia on Negotiate Techniques.
- In April 2021, I gave a seminar about price elasticity of demand in microeconomic analysis at the Economic Institutions course (Academic Discipline ING-IND/35) for the bachelor's degree in Mechanical Engineering at the University of Perugia

Supervisor for Master's theses

 Master's degree Course in Mechanical Engineering since a.y. 2021/2022 Co-supervisor for 2 master's theses at the University of Perugia

Orientation and dissemination interventions in the schools

- On January 25, 2023, Professor Andrea Fronzetti Colladon and I gave a Lectio Magistralis at the Liceo Statale "Assunta Pieralli" in Perugia entitled: Application of social network analysis and text mining to foster the energy transition.
- On January 31, 2023, with Professor Andrea Fronzetti Colladon and the BCI Lab team, we presented the BSc in Engineering Management at the Istituto Tecnico Tecnologico Statale ITTS "Alessandro Volta" in Piscille (Perugia).

SELECTION OF COURSES AND WORKSHOPS ATTENDED

Course entitled "Advanced Topics in Econometrics", provided by Politecnico di Milano in February 2022, taught by Professor Rocco Mosconi. I covered two separate topics in this course: Econometric Panel Data Analysis (14 hours) and Structural Equation Modelling - SEM (14 hours), working with STATA. The output of the course was the production of a paper consisting of the application of panel methodologies to analyze the impact of online reviews on hotel rating system using the semantic network approach.

- Course entitled "Deep Learning: principles, methodologies and applications", provided by the Engineering Department of the University of Perugia in April 2022, taught by Professor Gabriele Costante. In this course, I covered different topics: introduction to deep learning, convolutional neural networks, recurrent neural networks, applications of deep networks (supervised, unsupervised, self-supervised, weakly supervised) and deep reinforcement Learning (20 hours). In addition, I learnt how to use the Google Colab tool to apply the algorithms seen in theory to practical case studies. The programming language used is python with the following libraries: scikitLearn, keras and tensorflow.
- Master's Degree Course in Computer Science entitled "Machine Learning", provided by the Department of Mathematics and Computer Science, taught by Professor Valentina Poggioni from February 2022 to June 2022. The topics I have been learning are standard algorithms and models for classification and regression, deep learning, discriminative and generative models, representational learning, clustering, dimensionality reduction, recommender systems, anomaly detection and an introduction to Adversarial Machine Learning. As a result of this course, I applied classification algorithms in Python and word embedding techniques to predict the performance of companies using semantic features of job vacancies.
- Webinar entitled "BACS 2021: Switch to WFA (Work From Anywhere)", provided by the International Institute of Business Analysis (IIBA) Italy Chapter, on December 2, 2021.
- International workshop entitled "Health & Environmental Resilience and Livability in Cities", held online on 19-20 January 2022 in a partnership between IEREK - International Experts for Research Enrichment and Knowledge Exchange and the University of Perugia (Italy).
- RISIS Methods in Action Online Course on Matching Techniques for Treatment Effect Analysis. Politecnico di Milano organizes the course online on March 15th, March 22^{nd,} and March 24th, 2022.
- RISIS Methods in Action Online Course on Training on Machine Learning using Stata with applications to RISIS datasets. The course was held online on November 23rd, 2022
- Multinet Webinar entitled "Understanding resilience of social systems through behavioral data", presented by Esteban Moro, held online on 10 January 2023 in partnership between MIT & Universidad Carlos III de Madrid.

INVITED SPEAKER (INTERNATIONAL CONFERENCE AND WORKSHOP)

 Co-Guest speaker on the topic of "Semantic Brand Score (SBS) -Opportunities for Multimodal Semantic Network Analysis" in the "Envision Bootcamp: Hands-on Introduction to Multimodal (Signal) Analysis Techniques - Qualitative and Quantitative Understanding of Team Dynamics", organized by the Center for Advanced Design, on 8-10 December 2021, at Hasso Plattner Institute, Potsdam (Germany). https://www.centerforadvanceddesignstudies.org/

CONFERENCE ACTIVITIES

- Chair of "Urban Networks" track for the international conference "International Conference Networks 2021: A Joint Sunbelt and NetSci Conference", held online on 5-10 July 2021.<u>https://networks2021.net/</u>
- Reviewer for the "16th International Conference on Statistical Analysis of Textual Data (JADT2022)", held in Naples (Italy) on 6-8 July 2022. <u>https://jadt2022.vadistat.org/index.html</u>
- Reviewer for the "International Forum on Knowledge Asset Dynamics (IFKAD 2022)" held online on 20-22 June 2022. <u>https://www.ifkad.org/</u>
- Reviewer for the "10th International Conference on Collaborative Innovation Networks (COINs), held in Krakow (Poland) on 11-12 September 2022. <u>https://www.coinsconference.org/</u>

PUBLICATION

Articles published in Scientific Journals:

 Piselli, C., Fronzetti Colladon, A., Segneri, L., Pisello, A.L. (2022) "Evaluating and improving social awareness of energy communities through semantic network analysis of online news". Renewable & Sustainable Energy Reviews, 167, 112792. <u>https://doi.org/10.1016/j.rser.2022.112792</u>

Articles, Abstracts submitted to Conference:

- Speaker and author of the following paper presented at an international conference: Olbrück, T. Gloor, P.A, Segneri, L., Fronzetti Colladon, A." How does congruence between customer and brand personality influence the success of a company? The paper was presented at the "10th International Conference on Collaborative Innovation Networks (COINs), held in Krakow (Poland) on 11-12 September 2022. https://www.coinsconference.org/
- Speaker and author of the following abstract presented at a national conference: Segneri, L., Fronzetti Colladon, A., Fabiani, C., Pisello, A.L. "Energy news in Italy: trend and content analysis using a semantic network approach". The abstract was presented at the "XXII National Congress CIRIAF Interuniversity Centre for Research on Pollution and the Environment "Mauro Felli", held in Perugia on 7-8 April 2022. http://www.ciriaf.it/
- Speaker and author of the following accepted abstract presented at an international conference: Fronzetti Colladon, A., Segneri, L., Fabiani, C., Pisello, A.L. "A Text mining approach to investigate social awareness of green technologies". I discussed the abstract at the "International Forum on Knowledge Asset Dynamics (IFKAD 2022)", held online on 20-22 June 2022.<u>https://www.ifkad.org/.</u>
- Speaker and author of the following accepted abstract presented at an international conference: Segneri, L., Fronzetti Colladon, A., Fabiani, C., Pisello, A.L. "Text mining for socially responsible behavior: fostering the adoption of green technologies". I discussed the abstract in the track "Text mining for business" for the "16th International Conference on Statistical Analysis of Textual Data (JADT2022)", held in Naples (Italy) on 6-8 July 2022.<u>https://jadt2022.vadistat.org/index.html.</u>
- Speaker and author of the following accepted abstract presented at an international conference: Fronzetti Colladon, A., Segneri, L., Fabiani, C., Pisello, A.L. "Reshaping media communication to foster the adoption of green technologies". I will discuss the abstract at the "XLII International Social Networks Conference", held in Cairns (Australia) on 12-16 July 2022.<u>https://www.sunbelt2022.org/.</u>
- Speaker and author of the following paper presented at an international conference: Fronzetti Colladon, A., Segneri, L., Vitali, A.G. "Analyzing urban networks to understand gas station pricing strategies". The abstract was presented at the "International Conference Networks 2021: A Joint Sunbelt and NetSci Conference", held online 5-10 July 2021. https://networks2021.net/

- Speaker and author of the following paper presented at an international conference: Fronzetti Colladon, A., Pisello, A.L., Segneri, L., Fabiani C. "Using semantic importance analysis to evaluate energy storage awareness and acceptance". The paper was presented at the "5th European Conference on Social Network EUSN 2021", held online 7-10 September 2021. http://www.eusn2021.unina.it/
- Co-author of the following paper presented at an international conference: Piselli, C., Fronzetti Colladon, A., Segneri, L., Pisello, A.L. "Evaluating social awareness of energy communities through semantic network analysis of online news". The paper was presented at the "16th SDEWES Conference" held in Dubrovnik (Croatia) on 10-15 October 2021. https://www.dubrovnik2021.sdewes.org/
- Co-author of the following paper presented at an international conference: Fabiani, C., Segneri, L., Fronzetti Colladon, A., Pisello, A.L. "Analyzing thermal energy storage awareness and acceptance". The paper was presented at the "15th International Conference on Energy Storage (ENERSTOCK21)", held online 9-11 June 2021. https://www.enerstock2021.org/
- Co-author of the following paper presented at an international conference: Fronzetti Colladon, A., Grippa, F., Segneri, L. "A new system for evaluating brand importance: A use case from the fashion industry". The paper was presented at the "Business Intelligence Analytics and the Semantic Brand Score" workshop at the "13th ACM Web Science Conference", held online 21-25 June 2021. <u>https://dl.acm.org/conference/websci</u>

Book chapters

 Fronzetti Colladon, A., Grippa, F., Segneri, L. (2021). "A New System for Evaluating Brand Importance: A Use Case from the Fashion Industry". 13th ACM Web Conference 2021, 132-136. <u>https://doi.org/10.1145/3462741.3466678</u>

REVIEWER FOR INTERNATIONAL JOURNALS

Since 2021, I am a reviewer for several international journals. The date in brackets refers to the first review done for each journal (dd/mm/yyyy).

- International Journal of Engineering Business Management (05/10/2021, website:<u>https://journals.sagepub.com/home/enb</u>)
- PLOSE ONE (25/10/2021, website: <u>https://journals.plos.org/plosone/</u>)

- Electronic Commerce Research and Applications (17/12/2021, website <u>https://www.journals.elsevier.com/electronic-commerce-research-and-applications</u>)
- International Forum on Knowledge Asset Dynamics (IFKAD 2022) (20/01/2022, website <u>https://www.ifkad.org/</u>)
- Scientific Reports (18/05/2022, website <u>https://www.nature.com/srep/</u>)
- Journal of Information Science (28/10/2022, website <u>https://journals.sagepub.com/home/jis</u>)

In compliance with the Italian legislative Decree no.196/2003 and with the UE Regulation no. 679/2016, I hereby authorize you to use and process my personal details contained in this document.

Perugia, February 23, 2023