Moreno La Quatra

Assistant Professor (RTD-A) · *Speech Technlology and Machine Learning Lab*
Kore University of Enna
moreno.laquatra@unikore.it · www.mlaquatra.me
Citizenship: Italian

Research interests

Deep Learning, Audio Processing, Natural Language Processing

Education

2018 – 2022	**Politecnico di Torino** – Turin, Italy
	Ph.D. summa cum laude, Computer Engineering
	Academic Supervisor: Prof. Luca Cagliero
2017 – 2018	**Grenoble INP** – Grenoble, France
	M.Sc. in Data Science
	Academic Supervisor: Prof. Georges Quénot
2015 – 2018	**Politecnico di Torino & ENSIMAG** – Turin, Italy & Grenoble, France
	M.Sc. Computer Engineering (Double Degree program)
	Academic Supervisor: Prof. Elena Baralis
2012 – 2015	**Politecnico di Torino** – Turin, Italy
	B.Sc. Computer Engineering

Teaching experience

2024–ongoing	**Main Teacher, Cyber Security**
	Kore University of Enna
	Course Level: Master
2024–ongoing	**Main Teacher, Machine Learning**
	Kore University of Enna
	Course Level: Master
2024–ongoing	**Main Teacher, Deep Learning for Speech and Artificial Vision**
	Kore University of Enna
	Course Level: PhD

2021–2023	**Teaching assistant, Deep Natural Language Processing**
	Politecnico di Torino
	Course Level: Master
	Teaching assistant both for in-class and lab practices.
September 2022	**Tutor, NLP**
	Mediterranean Machine Learning Summer School
	Course Level: Master & PhD
	Teaching assistant for lab practices and responsible for tutorials in NLP.
2020–2022	**Teaching assistant, Text mining and analytics**
	Politecnico di Torino
	Course Level: PhD
	Teaching assistant for in-class practices.
2019–2023	**Teaching assistant, Fundamentals of Databases**
	Politecnico di Torino
	Course Level: Bachelor
	Teaching assistant for lab practices.

Academic and Industry Experience

2024–ongoing	Fellow Researcher
	Speech Technologies and Machine Learning Lab
	Kore University of Enna – Enna, Italy
2023–2024	Postdoctoral researcher
	Speech Technologies and Machine Learning Lab
	Kore University of Enna – Enna, Italy
2022–2023	Postdoctoral researcher in Natural Language Processing
	Politecnico di Torino – Turin, Italy
2018	Student Intern, Active Learning for Computer Vision
	Atos (Bull) - Grenoble, France
2017	Student Intern, NLP techniques for search engines
	BASSETTI - Grenoble, France

Journal Publications

2024	**Self-supervised Text Style Transfer using Cycle-Consistent Adversarial Networks**
	La Quatra, M., Gallipoli, G., Cagliero, L.
	ACM Transactions on Intelligent Systems and Technology. https://doi.org/10.1145/3678179.

2024   **TASP: Topic-based abstractive summarization of Facebook text posts**
Benedetto, I., **La Quatra, M.**, Cagliero, L., Vassio, L., Trevisan, M.
Expert Systems with Applications, 255, 124567. https://doi.org/10.1016/j.eswa.2023.124567.

2024   **Abstractive video lecture summarization: applications and future prospects**
Benedetto, I., **La Quatra, M.**, Cagliero, L., Canale, L., Farinetti, L.
Education and Information Technologies. https://doi.org/10.1007/s10639-023-11855-w.

2023   **BART-IT: An Efficient Sequence-to-Sequence Model for Italian Text Summarization**
La Quatra, M. & Cagliero, L.
Future Internet. https://doi.org/10.3390/fi15010015.

2022   **Transformer-based highlights extraction from scientific papers**
La Quatra, M. & Cagliero, L.
Knowledge-Based Systems. https://doi.org/10.1016/j.knosys.2022.109382.

2021   **Inferring multilingual domain-specific word embeddings from large document corpora**
Cagliero, L. & **La Quatra, M.**
IEEE Access. https://doi.org/10.1109/ACCESS.2021.3118093.

2021   **Leveraging full-text article exploration for citation analysis**
La Quatra, M., Cagliero, L. & Baralis, E.
Scientometrics. https://doi.org/10.1007/s11192-021-04117-4.

2020   **From Hotel Reviews to City Similarities: A Unified Latent-Space Model**
Cagliero, L., **La Quatra, M.** & Apiletti, D.
Electronics. https://doi.org/10.3390/electronics9010197.

2020   **Exploiting pivot words to classify and summarize discourse facets of scientific papers**
La Quatra, M., Cagliero, L. & Baralis, E.
Scientometrics. https://doi.org/10.1007/s11192-020-03532-3.

2020   **Extracting highlights of scientific articles: A supervised summarization approach**
Cagliero, L. & **La Quatra, M.**
Expert Systems with Applications. https://doi.org/10.1016/j.eswa.2020.113659.

Conference and Workshop Publications

2024   **Exploiting Foundation Models and Speech Enhancement for Parkinson's Disease Detection from Speech in Real-World Operative Conditions**
La Quatra, M., Turco, M. F., Svendsen, T., Salvi, G., Orozco-Arroyave, J. R., Siniscalchi, S. M.
Interspeech 2024. https://doi.org/10.21437/Interspeech.2024-522.

2024 **Benchmarking Representations for Speech, Music, and Acoustic Events**
La Quatra, M., Koudounas, A., Vaiani, L., Baralis, E., Cagliero, L., Garza, P., Siniscalchi, S. M.
ICASSP 2024 workshops. https://doi.org/10.1109/ICASSPW62465.2024.10625960.

2024 **Speech Analysis of Language Varieties in Italy**
La Quatra, M., Koudounas A., Baralis E., & Siniscalchi S. M..
LREC-COLING 2024. https://aclanthology.org/2024.lrec-main.1317.

2023 **Inclusively: An AI-Based Assistant for Inclusive Writing**
La Quatra, M., Greco, S., Cagliero, L. & Cerquitelli, T.
ECML-PKDD. https://doi.org/10.1007/978-3-031-43430-3_31.

2023 **DANTE at GeoLingIt: Dialect-Aware Multi-Granularity Pre-training for Locating Tweets within Italy**
Gallipoli, S., **La Quatra, M.**, Cambrin, A., Greco, S. & Cagliero, L.
EVALITA. https://ceur-ws.org/Vol-3473/paper14.pdf.

2023 **Transformer-based Prediction of Emotional Reactions to Online Social Network Posts**
Benedetto, I., **La Quatra, M.**, Cagliero, L., Vassio, L. & Trevisan, M.
ACL 2023 workshop - WASSA. https://aclanthology.org/2023.wassa-1.31.

2023 **ITALIC: An Italian Intent Classification Dataset**
Koudounas, A., **La Quatra, M.**, Vaiani, L., Colomba, L., Attanasio, G., Pastor, E., Cagliero, L. & Baralis, E.
INTERSPEECH. https://doi.org/10.21437/interspeech.2023-1980.

2022 **How Much Attention Should We Pay to Mosquitoes?**
La Quatra, M., Vaiani, L., Koudounas, A., Cagliero, L., Garza, P. & Baralis, E.
ACM Multimedia. https://doi.org/10.1145/3503161.3551594.

2022 **Transformer-Based Non-Verbal Emotion Recognition: Exploring Model Portability across Speakers' Genders**
Vaiani, L., Koudounas, A., **La Quatra, M.**, Cagliero, L., Garza, P. & Baralis, E.
ACM Multimedia 2022 workshop - MuSe. https://doi.org/10.1145/3551876.3554801.

2022 **ViPER: Video-Based Perceiver for Emotion Recognition**
Vaiani, L., **La Quatra, M.**, Cagliero, L. & Garza, P.
ACM Multimedia 2022 workshop - MuSe. https://doi.org/10.1145/3551876.3554806.

2022 **Leveraging summarization techniques in educational technology systems**
Benedetto, I., Canale, L., Farinetti, L., Cagliero, L. & **La Quatra, M.**
IEEE COMPSAC. https://doi.org/10.1109/COMPSAC54236.2022.00068.

2022 **Leveraging multimodal content for podcast summarization**
Vaiani, L., **La Quatra, M.**, Cagliero, L. & Garza, P.
ACM SAC. https://doi.org/10.1145/3477314.3507106.

2021 **Automatic slides generation in the absence of training data**
Cagliero, L. & **La Quatra, M.**
IEEE COMPSAC. https://doi.org/10.1109/COMPSAC51774.2021.00025.

2021 **Cross-lingual timeline summarization**
Cagliero, L., **La Quatra, M.**, Garza, P. & Baralis, E.
IEEE AIKE. https://doi.org/10.1109/AIKE52691.2021.00014.

2021 **E-MIMIC: Empowering Multilingual Inclusive Communication**
Attanasio, G., Greco, S., **La Quatra, M.**, Cagliero, L., Tonti, M., Cerquitelli, T. & Raus, R.
IEEE Big Data. https://doi.org/10.1109/BigData52589.2021.9671868.

2021 **Summarize Dates First: A Paradigm Shift in Timeline Summarization**
La Quatra, M., Cagliero, L., Baralis, E., Messina, A. & Montagnuolo, M.
ACM SIGIR. https://doi.org/10.1145/3404835.3462954.

2020 **End-to-end training for financial report summarization**
La Quatra, M., Cagliero, L. & Baralis, E.
COLING 2020 workshop - FNP. https://aclanthology.org/2020.fnp-1.20.

2019 **Poli2sum at cl-scisumm-19: Identify, classify, and summarize cited text spans by means of ensembles of supervised models**
La Quatra, M., Cagliero, L. & Baralis, E.
SIGIR 2019 workshop - BIRNDL. http://ceur-ws.org/Vol-2414/paper24.pdf.

Technical skills

Programming languages
Python, PHP, JavaScript, C/C++

Software
PyTorch, transformers, SciKit-Learn, LaTeX, Git

Languages
English (fluent), Italian (native), French (proficient)