



Mattia Soldan

PhD student at King Abdul-
lah University of Science and
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About me

My research interests are settled at the intersection between Computer Vision and Natural Language Processing. My non-academic passions instead range from diving to skiing and many other outdoor activities. I was born and raised in Italy, now living abroad to expand my knowledge and personal growth.



Education

- 2019 - Now Doctor of Philosophy (Ph.D), Electrical Engineering
King Abdullah University of Science and Technology, Thuwal (Saudi Arabia)
Leveraging deep-learning techniques to tackle challenging computer vision tasks. Interested in action retrieval with language query, text grounding in video and video captioning. Member of the Image and Video Understanding Laboratory (IVUL).
- July 2019 DeepLearn - International Summer School on Deep Learning
Warsaw, Poland
State-of-the-art review of Deep Learning methods. Particular focus on mathematical approaches to modelling and tools.
- 2015 - 2017 Master of Science (M.Sc.), Telecommunication Engineering, 110/110
University of Padova, Padova (Italy)
Thesis: "Recurrent Neural Network based Multi-Modal Gait Anomaly Detection System".
- 2011 - 2015 Bachelor of Science (B.Sc.), Information Engineering, 101/110
University of Padova, Padova (Italy)
Thesis: "Analysis of WINNER Radio Channel Model for Performance Evaluation in LTE Network simulations".

Publications

- 2020 VLG-Net: Video-Language Graph Matching Network for Video Grounding. (ICCVW)
- 2019 Temporal Localization of Moments in Video Collections with Natural Language. (arXiv:1907.12763)
- 2019 Seq2Seq RNN based Gait Anomaly Detection from Smartphone Acquired Multimodal Motion Data. (arXiv:1911.08608)

Projects

- 2020 AI-Sports: Taking E-sports To The Next Level with AI.
My team placed 1st in the NEOM AI Challenge awarded during the Global-AISummit in Riyadh.
- 2017 Fountain Codes Based Distributed Storage Algorithms for Large-Scale Wireless Sensor Networks.
- 2016 Background estimation with probabilistic approaches and Stauffer and Grimson algorithm based on Gaussian Mixture Model.
- 2016 Advanced techniques for noise removal in audio signal processing.

Experiences

- 2018-2019 Research Intern
King Abdullah University of Science and Technology, Thuwal (Saudi Arabia)
Exploration of methods and techniques for computer vision and natural language processing intersection.
- 2018 Telecommunication Engineer
Telebit S.r.l, Dosson di Casier (TV, Italy)
As part of the Technical Office, I applied my knowledge on mobile networks (2G/3G/LTE) and fixed networks (Fiber optics) to curate the technical documentation for public tender proposals preparation.

Language

- Italian: Native.
- English: IELTS Feb. 2019, Overall Band Score 8/9.

Skills

- Programming languages: Python, Java, Javascript.
- Development tools: Docker, Anaconda, Git.
- Software and Applications: MATLAB, CST studio suite, AutoCAD, LaTeX.