








# Mattia Soldan

Ph.D. student @ King Abdullah University of Science and Technology (KAUST)

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## About me

Born and raised in Italy, now seeking new experiences and personal growth around the globe. My research interests are settled at the intersection between Computer Vision and Natural Language Processing. "I'd like to stop scrolling through my phone's gallery looking for video content and rather have my deep learning model do that for me." In my spare time, I enjoy outdoor activities such as diving, skiing, camping, and I love to talk about that!!!



## Education

- 2019 - Now** Doctor of Philosophy (Ph.D), Electrical and Computer Engineering  
*King Abdullah University of Science and Technology, Thuwal (Saudi Arabia)*  
Leveraging deep learning techniques to tackle challenging computer vision tasks. Interested in natural language grounding in videos and moment retrieval. Member of the Image and Video Understanding Laboratory (IVUL).
- 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

- 2022** MAD: A Scalable Dataset for Language Grounding in Videos from Movie Audio Descriptions. (CVPR)
- 2021** VLG-Net: Video-Language Graph Matching Network for Video Grounding. (ICCVW)
- 2021** Large eddy simulation with flamelet progress variable approach combined with artificial neural network acceleration (AIAA)
- 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.  
1st place in the NEOM AI Challenge awarded during the GlobalAISummit 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

- 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.
- 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 8.0/9.0