

Emanuele Sansone

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Summary

Researcher in the field of machine learning and artificial intelligence. I worked on unsupervised and representation learning. Along with research, I share a passion for the world of sport. I am an experienced ski instructor with international ski racing background.

Education

2013-2018	<p>Ph.D. <i>ICT doctoral school, University of Trento, Italy</i> Thesis: "Towards Uncovering the True Use of Unlabeled Data in Machine Learning" Advisor: Prof. Francesco G.B. De Natale. Dissertation in multiple areas of machine learning, including semi-supervised, positive unlabeled and unsupervised representation learning.</p>
2011-2012	<p>M.Sc. in Telecommunications Engineering University of Trento, Italy Thesis: "Multimodal Photo Galleries Synchronization" Advisor: Prof. Nicola Conci, Giulia Boato. 110/110 <i>summa cum laude</i> Gpa: 28.82/30 Computer vision application for automatic synchronization of photo galleries from multiple users attending the same event (C++ language).</p>
2008-2010	<p>B.Sc. in Telecommunications Engineering University of Trento, Italy Thesis: "Master P-NET protocol implementation on PIC 32 architecture" Advisor: Prof. Dario Petri, Eng. Michele Corrà. Programming a master device in a network composed by different sensors and actuators. Implementation of P-NET protocol over a PIC 32 microcontroller (C language).</p>

Work Professional Experience

2018-2020	<p>Research Scientist <i>Huawei Technologies R&D, London, UK</i> Working in the area of deep generative models and self-supervised learning. Mentoring intern students.</p>
2018-to date	<p>Reviewer Serving as a reviewer for international journals in the area of machine learning and signal processing, such as IEEE Transactions of Neural Networks and Learning Systems, Machine Learning (Springer) and IEEE Transactions on Image Processing.</p>

Academic Experience

2016	Teaching Assistant, Computer Vision (Code 140266) <i>M.Sc. in Telecommunications Engineering, University of Trento, Italy</i> Machine Learning for Computer Vision (introduction to statistical learning theory and neural networks).
2015	Teaching Assistant, Multimedia Networking (Code 140151) <i>M.Sc. in Telecommunications Engineering, University of Trento, Italy</i> Principles of video compression/coding (useful for transmission/storage of video files).
2015-2016	Research Intern <i>LAMDA group, Nanjing University, China</i> Advisor: Prof. Zhi-Hua Zhou. Working on positive unlabeled learning.

Sport Professional Experience

2011-to date	Ski master instructor <i>Italy</i> Holding several professional education and training courses for ski instructors and candidate ski instructors. This is the highest professional degree in alpine skiing (the total number of ski master instructors in Italy is around 200).
2007-2017	Ski coach <i>Italy</i> Coach of young athletes (6-20 years old) in several racing ski teams: Ski Team Sopramonte (2007/2008), Sci Club Padova (2008/2009), Sci Club Panarotta (2009-2011), Ski Team Paganella (2013/2014), Campiglio Ski Team (2016/2017).
2002-2007	Ski athlete <i>Italy</i> See a sample list of records .

Awards and Certificates

2020	Algorithms Specialization Certificate of completion Organization: Coursera (Stanford University)
2018	Full Stack Deep Learning Bootcamp <i>Berkeley, USA</i> Certificate of completion Organization: University of California, Berkeley
2017	Neural Networks for Machine Learning Certificate of completion Organization: Coursera (University of Toronto)
2016	Academic Hardware Grant Award Provision of a NVIDIA Titan X GPU Organization: NVIDIA corporation
2015	Machine Learning Summer School <i>Austin, USA</i>

	Certificate of completion Organization: University of Texas at Austin
2012	Merit Award <i>Trento, Italy</i> Award assigned to distinguished students Organization: University of Trento
2011	Ski Master Instructor <i>Milan, Italy</i> Certificate Organization: FISI, CoScuMa
2011	Ski Coach (3° level) <i>Milan, Italy</i> Certificate Organization: FISI, STF
2007	Ski Instructor <i>Trento, Italy</i> Certificate Organization: PAT

Invited Talks

2019	Coulomb Autoencoders Symposium on Deep Generative Models, British Computer Society (London, UK)
2017	Generative Adversarial Networks Fondazione Bruno Kessler (Trento, Italy)

Publications

2020	Coulomb Autoencoders E. Sansone, H. T. Ali, J. Sun To appear in European Conference on Artificial Intelligence (ECAI)
2018	Towards Uncovering the True Use of Unlabeled Data in Machine Learning E. Sansone PhD Thesis
2018	Efficient Training for Positive Unlabeled Learning E. Sansone, F.G.B De Natale, Z.H. Zhou IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI), Code
2017	Training Feedforward Neural Networks with Standard Logistic Activations is Feasible E. Sansone, F.G.B. De Natale arXiv pre-print
2017	Automatic Synchronization of Multi-User Photo Galleries E. Sansone, K. Apostolidis, N. Conci, G. Boato, V. Mezaris, F.G.B. De Natale IEEE Transactions on Multimedia (TMM), Code
2016	Classtering: Joint Classification and Clustering with Mixture of Factor Analysers E. Sansone, A. Passerini, F.G.B. De Natale European Conference on Artificial Intelligence (ECAI), Code
2014	Synchronizing Multi-User Photo Galleries with MRF E. Sansone, G. Boato, MS. Dao MediaEval Workshop
2013	Event Clustering and Classification from Social Media: Watershed-based and Kernel Methods TV. Nguyen, MS. Dao, R. Mattivi, E. Sansone, F.G.B. De Natale, G. Boato MediaEval Workshop

Languages

Italian:	Mothertongue
English:	Fluent (C2)
German:	Fluent (B2)

Other Interests

Volunteering	From 2012 to 2014, I've participated to a no-profit association, GiPro , composed by young representatives of different sectors (e.g. ski instructors, engineers, lawyers, psychologists). The goal of the association is to promote the professional categories on the territory and stimulate the inter-professional collaboration of young people.
Others	I like playing soccer and hiking.

References

Francesco De Natale - Full Professor University of Trento - francesco.denatale@unitn.it
Duc-Tien Dang-Nguyen Assoc. Professor University of Bergen - ductien.dangnguyen@uib.no