Davide Abati

Computer Vision Ph.D. student

Skills

Research	○ Computer Vision		○ Computer Science
	○ Machine Learning		○ Algorithms
	○ Neural Networks		○ Deep Learning
Program-ming	○ Python		○ Git
	○ Tensorflow		○ Pytorch
	○ Keras		○ Theano

Work Experience

June-Sept. 2019	**Engineering Intern**, *Qualcomm AI Research Netherlands*. I was an intern at Qualcomm Research in Amsterdam.
2016	**Research Fellow**, *University of Modena and Reggio Emilia*. I was selected through a competitive process to design and implement computer vision solutions for automotive applications. After two months I resigned in order to accept the Ph.D. scholarship I won.
2015	**Web Development Intern**, *Ot Consulting*, Reggio Emilia.

Education

March 2020 (expected)	**Ph.D. Student**, *University of Modena and Reggio Emilia*. Advisor: Prof. Rita Cucchiara I am currently a computer vision Ph.D. student at AimageLab. In my first year I focused on automotive oriented research, now published on two transactions journals. In the second year I explored the employment of deep generative models for anomaly detection.
2016	**Postgraduate Master in Visual Computing and Multimedia Technologies**, *University of Modena and Reggio Emilia*. I won one of the 12 scholarships available for the first edition of the school. I worked in several group projects addressing the management of multimedia data and its elaboration, analysis and transmission.
2015	**Master's degree in Computer Engineering**, *University of Modena and Reggio Emilia*. Final mark: 110/110 cum laude Thesis title: Search system on images and 3D details for cultural heritage Advisors: Prof. Rita Cucchiara, Ing. Giuseppe Serra Awards: Unimore Degree Award 2013/2014
2012	**Bachelor's Degree in Computer Engineering**, *University of Modena and Reggio Emilia*.

Languages

Italian	Native Speaker	
English	B2	*good working knowledge*

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 github.com/DavideA

Publications

2019 **Latent Space Autoregression for Novelty Detection**
D. Abati, A. Porrello, S. Calderara, R. Cucchiara
IEEE International Conference on Computer Vision and Pattern Recognition

2019 **Classifying Signals on Irregular Domains via Convolutional Cluster Pooling**
A. Porrello, D. Abati, S. Calderara, R. Cucchiara
International Conference on Artificial Intelligence and Statistics

2018 **Self-Supervised Optical Flow Estimation by Projective Bootstrap**
S. Alletto, D. Abati, S. Calderara, R. Cucchiara, L. Rigazio
IEEE Transactions on Intelligent Transportation Systems

2018 **Predicting the Driver's Focus of Attention: the DR(eye)VE Project**
A. Palazzi, D. Abati, S. Calderara, F. Solera, R. Cucchiara
IEEE Transactions on Pattern Analysis and Machine Intelligence

2017 **Attentive Models in Vision: Computing Saliency Maps in the Deep Learning Era**
M. Cornia, D. Abati, L. Baraldi, A. Palazzi, S. Calderara, R. Cucchiara
16th International Conference of the Italian Association for Artificial Intelligence

2017 **Learning to map vehicles into bird's eye view**
A. Palazzi, G. Borghi, D. Abati, S. Calderara, R. Cucchiara
19th International Conference on Image Analysis and Processing
Best Paper Honorable Mention

2016 **Exploring Architectural Details Through a Wearable Egocentric Vision Device**
S. Alletto, D. Abati, G. Serra and R. Cucchiara
Sensors special issue "Sensors for Entertainment"

2015 **Wearable vision for Retrieving architectural details in augmented tourist experiences**
S. Alletto, D. Abati, G. Serra and R. Cucchiara
International Conference on Intelligent Technologies for Interactive Entertainment
Best Paper Award

Teaching Activities

2018 AI-DLDA 2018, *International Summer School on Artificial Intelligence*, Laboratory lecturer - Predicting human eye fixations.

2018 Machine Learning and Deep Learning, *Prof. Simone Calderara*, Laboratory Lecturer.

2017 Computer Vision, *Prof. Rita Cucchiara*, Laboratory lecturer.

2017 Pattern Recognition and Machine Learning, *Prof. Simone Calderara*, Laboratory lecturer.

2017 Pattern Recognition and Machine Learning - MuMeT 2017, *Prof. Simone Calderara*, Laboratory lecturer.

Schools, Courses, Certificates

REGML 2018, *Genova (GE), Italy*, certificate.

ICVSS 2017, *Scicli (RG), Italy*, certificate.

CIS Spring Camp 2016, *Queen Mary University of London*, website.

Probabilistic Graphical Models: Representation, *Stanford University on Coursera*, certificate.

Probabilistic Graphical Models: Inference, *Stanford University on Coursera*, certificate.

Probabilistic Graphical Models: Learning, *Stanford University on Coursera*, certificate.

Machine Learning, *Stanford University on Coursera*, certificate.

Introduction to Probability, *Massachusetts Institute of Technology on edX*, certificate.