# Cristina Segalin



Postdoc at Caltech

## Short Bio

BSc in Multimedia Computer Science (2010), MSc in Engineering and Computer Science (2012), PhD in Computer Science (2016) at the Dept. of Computer Science of the University of Verona (Italy). Visiting student at School of Computing Science (Glasgow, Scotland), School of Computer Science (Birmingham, UK), Intern at IIT (Genova, IT), Disney Research (Pittsburgh, PA). Currently Postdoc at CalTech (Pasadena, CA).

Research interests: Machine Learning (Deep Learning), Computer Vision (Image/Video Processing, Computational Aesthetics, Tracking, Action Recognition), Re-Identification, NLP, Social Signal Processing (Affective Computing, Verbal and Nonverbal Behavior Analysis), Social Media Analysis, Big Data, Biometrics, Psychology, Neuroscience, Computational Ethology, Virtual and Augmented Reality, Human Computer Interaction.

# **Current Position**

08/01/16 - Present	<ul> <li>Postdoctoral Scholar, California Institute of Technology, Pasadena, CA.</li> <li>Topics: Machine Learning, Computer Vision, Computational Ethology, Neuroscience (Deep Learning, Tracking, Action Recognition)</li> </ul>
	Education
	Education
01/13 - 12/15	Ph.D. in Computer Science, Dept. of Computer Science, University of Verona, Italy.
	• Thesis title: A Social Signal Processing Perspective on Computational Aesthetics: Theories and Applications.
	• Topics: Social Signal Processing, Pattern Recognition, Computer Vision, Computational Aesthetics, Social Media Analysis, Biometrics, Image Processing
10/10 - 07/12	Master Degree in Computer Engineering and Computer Science, Dept. of Computer Science, University of Verona, Italy, Curriculum: Visual Computing.
	• Thesis title: Statistical analysis of Skype conversations: Recognizing individual by their chatting style.
	<ul> <li>Thesis topics: Re-identification, Social Signal Processing</li> </ul>
10/07 - 12/10	<b>Bachelor Degree in Multimedia Information Technology</b> , Dept. of Computer Science, University of Verona, Italy.
	<ul> <li>Sistema di rilevamento automatico e riconoscimento volti: aspetti metodologici e pratici.</li> <li>Thesis topics: Face recognition, Re-identification</li> </ul>
	Awards and Grants
Scholarship	<b>ICVSS Best Presentation Award 2015</b> - International Computer Vision Summer School best poster presentation.
PhD Grant	<b>Erasmus Placement 2013</b> - Second in the list for four grants to be assigned to PhD students for placements in companies, facilities in one of the countries participants to the LLP program.

Scholarship **PhD Scholarship** - University of Verona that supported my PhD from Jan. 2013 to Dec 2015

# Scientific Interests

Machine Learning (Deep Learning), Computer Vision (Image/Video Processing, Computational Aesthetics, Tracking, Action Recognition), Re-Identification, NLP, Social Signal Processing (Affective Computing, Verbal and Nonverbal Behavior Analysis), Social Media Analysis, Big Data, Biometrics, Psychology, Neuroscience, Computational Ethology, Virtual and Augmented Reality, Human Computer Interaction

# Additional Information

- Reviewer NIPS, ACCV, ICCV, CVPR, ECCV, CHI, PLOS ONE, NEUROCOM, IEEE Multimedia, Affective Computing, AIMed
- Journals IEEE Transaction on Affective Computing, IEEE Transaction on Information Forensics and Security, Computer Vision Image Understanding

Conferences APS17, ACMMM17/12, WIML16, ICMI16/14, ACCV14, ICIP14/13, ACMMMBNI13, CIARP13, AVSS13, ICPR13, WIAMIS12

Supervision Francesca Zerbato, Luca Brunelli, Marco Fanini, Walter Riviera, Elena Boschetti - University of Verona, Verona, Italy

Zack Polizzi, David Mace, Jennifer Sun - CalTech, Pasadena, CA

## Skills

Coding Matlab (>8 years), Python (>2 year), R, C++/C#, HTML, CSS, Javascript, PHP, Java, SystemC, VHDL, Assembly, SIS, SQL, Visual Basic

Multimedia/Design Photoshop, Illustrator, After Effects, Blender, Unity3D, 3ds Max, Maya

Tools Tensorflow, Caffe, MatConvNet, PyTorch, LATEX, git, bash scripting, ARToolkit, PRTools, Flickr API, Twitter API, Processing

- OS All Microsoft OS's, Linux, Mac OS's based system
- Languages Italian, English, German

## Qualities

Personal skills Inclined to analyze both theoretical and practical problems, able to solve them by employing novel concepts, good communication, eager to learn and develop new skills. Good software engineering abilities.

Experience with High level programming languages, digital design flow, validation and testing techniques, scripting languages, web interface development, data visualization.

Interpersonal skills Strong ability to blend in new contexts, good skills in teamwork, good organizational abilities, dynamism, desire for learning, extrovert.

Driving license Category B.

Hobby and Sport Photo editing and photography, Virtual/Augmented Reality and Brain Computer Interfaces game development, watching tv series and movies, reading books, yoga, running, figure roller-skating (practiced for 4 years), swim (practiced for 10 years at competitive level), gold medal in high jump (2005-2007) and long jump (2005-2006) at regional competitions.

#### Press

- 5 Lessons to Learn from a Disney Research Scientist DMN
- Disney's Deep Dive on Personality Research, and Its Potential Implications for Brand Marketers Street Fight

#### Presentations

13th Feb 2018	Social Profiling through Image Understanding - Legendary Analytics - Boston, MA
13th Feb 2018	Unveiling the Multimedia Unconscious: Implicit Cognitive Processes and Personality Inference through the Images we Like - MIT Media Lab - Boston, MA
12th Feb 2018	Social Profiling through Image Understanding - MIT Media Lab - Boston, MA
24th Oct 2017	What your Facebook Profile Picture Reveals about your Personality: A Feature-based Approach - ACM MM, Mountain View, CA
26th May 2017	Social Profiling through Image Understanding - Association for Psychological Science Convention - Boston, $MA$
5th Dec 2016	Social Profiling through Image Understanding - NIPS, Barcelona, ES
25th Feb 2016	Computational Aesthetics for Multimedia, a Social Signal Processing Perspective - CalTech, Pasadena, CA
29th Oct 2015	Computational Aesthetics for Multimedia - UNSW School of Psychology, Sydney, AUS
27th Oct 2015	Computational Aesthetics for Multimedia - UTS, Sydney, AUS
21st Oct 2015	Computational Aesthetics for Multimedia - NICTA, Canberra, AUS
17th July 2015	ICVSS oral presentation for best poster presentation award - Sicily, IT
4th Nov 2014	Recognizing People by Their Personal Aesthetics: a Statistical Multi-level Approach - ACCV, Singapore, SG $$
30th Oct 2014	Recognizing People by Their Personal Aesthetics: a Statistical Multi-level Approach- ICIP, Paris, FR

### Publications

- [18] C. Segalin, A. Vinciarelli and M. Musolesi. 'The Role of Images as Social Signals: An Analysis of the Influence of Visual, Textual and Social Cues on Information Propagation in Twitter'. In: Proceedings of theInternational Conference on Multimedia. 2018.
- [17] S. Matz, C. Segalin, D. Stillwell, S. R. Müller and M. Bos. 'Personality-customized communcation: Using computational methods to predict the personal appeal of marketing images'. In: *Journal of Consumer Psychology* (2017).
- [16] C. Segalin, F. Celli, B. Lepri, M. Kosinski, M. Cristani and L. Polonio. 'What your Facebook Profile Picture Reveals about your Personality: A Feature-based Approach'. In: ACM Multimedia (2017).
- [15] C. Segalin, D. Cheng and M. Cristani. 'Social Profiling through Image Understanding: Personality Inference using Convolutional Neural Networks'. In: *Computer Vision and Image Understanding* (2016).
- [14] C. Segalin, D. Cheng and M. Cristani. 'Social Profiling through Image Understanding: Personality Inference using Convolutional Neural Networks'. In: NIPS WIML Workshop (2016).
- [13] C. Segalin, A. Perina, M. Cristani and A. Vinciarelli. 'The pictures we like are our Image: Continuous mapping favorited pictures into self-assessed and attributed personal traits'. In: *IEEE Transactions on Affective Computing* (2015).
- [12] P. Lovato, M. Bicego, C. Segalin, A. Perina, N. Sebe and M. Cristani. 'Faved! Biometrics: Tell Me Which Image You Like and I'll Tell You Who You Are'. In: *IEEE Transactions on Information Forensics and Security* 9.3 (2014), pp. 364–374.
- [11] C. Segalin, A. Perina and M. Cristani. 'Biometrics on Visual Preferences: a "Pump and Distill" Regression Approach'. In: IEEE International Conference on Image Processing. 2014.
- [10] **C. Segalin**, A. Perina and M. Cristani. 'Personal Aesthetics for Soft Biometrics: a Generative Multi-resolution Approach'. In: *Proceedings of the International Conference on Multimodal Interaction*. 2014.
- [9] **C. Segalin**, A. Perina and M. Cristani. 'Recognizing People by Their Personal Aesthetics: a Statistical Multi-level Approach'. In: *Proceedings of the Asian Conference on Computer Vision*. 2014.
- [8] M. Cristani, A. Vinciarelli, C. Segalin and A. Perina. 'Unveiling the multimedia unconscious: Implicit cognitive processes and multimedia content analysis'. In: *Proceedings of the ACM international conference on Multimedia*. ACM. 2013, pp. 213–222.

- [7] P. Lovato, A. Perina, D. S. Cheng, C. Segalin, N. Sebe and M. Cristani. 'We like it! Mapping image preferences on the counting grid.' In: *IEEE International Conference on Image Processing*. 2013, pp. 2892–2896.
- [6] A. Pesarin, M. Tait, A. Vinciarelli, C. Segalin, G. Bilancia and M. Cristani. 'Generative modelling of dyadic conversations: characterization of pragmatic skills during development age'. In: *Multimodal Pattern Recognition of Social Signals in Human-Computer-Interaction*. 2013, pp. 1–8.
- [5] G. Roffo, C. Segalin, A. Vinciarelli, V. Murino and M. Cristani. 'Reading between the turns: Statistical modeling for identity recognition and verification in chats'. In: *IEEE International Conference on Advanced Video and Signal Based Surveillance*. IEEE. 2013, pp. 99–104.
- [4] G. Roffo, M. Cristani, F. Pollick, C. Segalin and V. Murino. 'Statistical Analysis of Visual Attentional Patterns for Video Surveillance'. In: Progress in Pattern Recognition, Image Analysis, Computer Vision, and Applications. 2013, pp. 520–527.
- [3] C. Segalin, A. Pesarin, A. Vinciarelli, M. Tait and M. Cristani. 'The expressivity of turn-taking: Understanding children pragmatics by hybrid classifiers'. In: *International Workshop on Image Analysis for Multimedia Interactive Services*. IEEE. 2013, pp. 1–4.
- [2] M. Cristani, G. Roffo, C. Segalin, L. Bazzani, A. Vinciarelli and V. Murino. 'Conversationally-inspired stylometric features for authorship attribution in instant messaging'. In: *Proceedings of theInternational Conference on Multimedia*. ACM. 2012, pp. 1121–1124.
- [1] M. Tait, M. Cristani, A. Pesarin, **C. Segalin** and G. Bilancia. 'Lo sviluppo delle competenze pragmatica tra i 3 e gli 8 anni'. In: XXI Congresso Nazionale AIRIPA, Bari. 2012.

12th June 2018

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