

# Group Emotion Recognition in the Wild Using Deep Learning and Vision Services

**Luca Surace**

*Department of Mathematics and Computer Science - Unical*

*Visiting Student (Erasmus Placement) at Plymouth University (UK)*

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This seminar will cover methodologies to recognize the emotion of a group of people through the analysis of pictures "in the wild". Group emotion recognition is a challenging problem, due to the unstructured environments in which everyday life pictures are taken and to the objective difficulty to consider the group as a whole. Some of the obstacles for an effective classification are occlusions, not frontal face pose, variable lighting conditions, image quality, people expressing different emotions, etc. We are going to discuss a possible solution framework based on a novel combination of deep neural networks and Bayesian classifiers. Use cases and code examples of external vision services (e.g. Microsoft Cognitive Services) will be explained. This research problem has been addressed during an internship period at the University of Plymouth (UK), under the mentorship of Prof. Angelo Cangelosi, obtaining excellent results and the participation at the Emotion Recognition in the Wild Challenge 2017 at ICMI 2017 (Glasgow, UK).