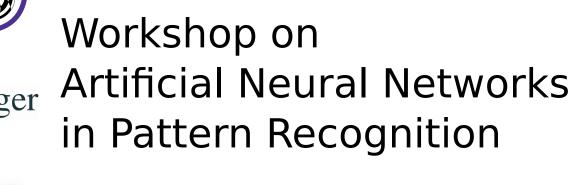


8th IAPR TC3











Università degli Studi di Siena Dipartimento di Ingegneria dell'Informazione e Scienze Matematiche





Day 1 - 19th September 2018

08.45 - 09.45 Registration

09.45 - 10.00 Opening. Simone Marinai: Message from IAPR

10.00 - 10.50 Invited speaker: Marco Gori

What's Wrong With Computer Vision?

10.50 - 11.15 Coffee break

11.15 - 12.30 Session 1: Learning paradigms/algorithms

Abel Zacarias and Luís Alexandre

SeNA-CNN: Overcoming Catastrophic Forgetting in Convolutional Neural Networks by Selective Network Augmentation

Shigeo Abe

Effect of Equality Constraints to Unconstrained Large Margin Distribution Machines

Vincenzo Laveglia and Edmondo Trentin

A Refinement Algorithm for Deep Learning via Error-driven Propagation of Target Outputs

12.30 - 14.30 Lunch

14.30 - 15.45 Session 2: Feature-oriented approaches

Mohammadreza Amirian, Friedhelm Schwenker and Thilo Stadelmann

Trace and Detect Adversarial Attacks on CNNs using Feature Response Maps

Catuscia Palamidessi and Marco Romanelli

Feature selection with Rényi min-entropy

Ludwig Lausser, Robin Szekely, Viktor Kessler, Friedhelm Schwenker and Hans Kestler

Selecting Features from Foreign Classes

15.45 - 16.10 Coffee break

16.10 - 17.25 Session 3: Vision and image processing

Alessandro Rossi, Antonio Rizzo and Francesco Montefoschi

ATM Protection Using Embedded Deep Learning Solutions

Zahra Ziran and Simone Marinai

Object Detection in Floor Plan Images

Samuele Capobianco, Leonardo Scommegna and Simone Marinai

Historical Handwritten Document Segmentation by Using a Weighted Loss









Day 2 - 20th September 2018



10.00 - 10.50 Invited speaker: Marcello Pelillo

Hume-Nash Machines: Context-Aware Models of Learning and Recognition

10.50 - 11.15 C

Coffee break

11.15 - 12.30

Session 4: Probabilistic methods

Roghayeh Soleymani, Eric Granger and Giorgio Fumera

F-Measure Curves for Visualizing Classifier Performance with Imbalanced Data

Edmondo Trentin

Maximum-likelihood Estimation of Neural Mixture Densities: Model, Algorithm, and Preliminary Experimental Evaluation

Heinke Hihn, Sebastian Gottwald and Daniel A. Braun Bounded Rational Decision-Making with Adaptive Neural Network Priors

12.30 - 14.30

Lunch

14.30 - 15.45

Session 5: Partially supervised learning Paolo Andreini, Simone Bonechi, Monica Bianchini

and Franco Scarselli

Generating Bounding Box Supervision for Semantic Segmentation with Deep Learning

Adrian T. Ruiz, Patrick Thiam, Friedhelm Schwenker and Günther Palm

A k-Nearest Neighbor Based Algorithm for Multi-Instance Multi-Label Active Learning

Alberto Rossi, Matteo Tiezzi, Giovanna Maria Dimitri, Monica Bianchini, Marco Maggini and Franco Scarselli

Inductive--Transductive Learning with Graph Neural Networks

15.45 - 16.15 Coffee break

16.15 - 22.30 Guided city tour and banquet







Day 3 - 21st September 2018



09.30 - 10.20 IAPR invited speaker: Thilo Stadelmann

Deep Learning in the Wild

10.20 - 11.30 Poster session (program on next page)

10.50 - 11.15 Coffee break

11.30 - 12.45 Session 6: Other applications

Andrea Zugarini, Jérémy Morvan, Stefano Melacci, Stefan Knerr and Marco Gori

Combining Deep Learning and Symbolic Processing for Extracting Knowledge from Raw Text



Sentiment Analysis

Thilo Stadelmann, Sebastian Glinski-Haefeli, Patrick Gerber and Oliver Dürr

Capturing Voice Prosody with RNNs for Improved Speaker Clustering

Lunch and workshop closing





12.45



Day 3 - Poster session

Salvatore Mangano, Carlos Delgado, María Isabel Bernardos, Miguel Lallena and Juan José Rodríguez Vázquez

Convolutional Neural Network Methods for Reconstruction of Data of the Cherenkov Telescope Array



Baptiste Wicht, Andreas Fischer and Jean Hennebert

DLL: A Blazing Fast Deep Neural Network Library



Maxim Sharaev, Alexander Andreev, Alexey Artemov, Evgeny Burnaev, Ekaterina Kondratyeva, Svetlana Sushchinskaya, Irina Samotaeva, Vladislav Gaskin and Alexander Bernstein

Pattern Recognition Pipeline for Neuroimaging Data

Philipp Oberdiek, Matthias Rottmann and Hanno Gottschalk

Classification Uncertainty of Deep Neural Networks Based on Gradient Information

Volkma Guha J Video a

Volkmar Frinken, Satish Ravindran, Shriphani Palakodety, Guha Jayachandran and Nilesh Powar

Video and Audio Data Extraction for Retrieval, Ranking and Recapitulation (VADER3)

UNIVERSITÀ DI SIENA

1240

Benjamin Bruno Meier, Ismail Elezi, Mohammadreza Amirian, Oliver Dürr and Thilo Stadelmann

Learning Neural Models for End-to-End Clustering

Maxime Sazadaly, Pierre Pinchon, Arthur Fagot, Lionel Prevost and Myriam Maumy-Bertrand

Cascade of Ordinal Classification and Local Regression for Audio-based Affect Estimation

Taraggy Ghanim, Mahmoud Khalil and Hazem Abbas

PHoG Features and Kullback-Leibler Divergence based Ranking Method for Handwriting Recognition

Dmitry Smolyakov, Nadezda Sviridenko, Evgeny Burnaev and Evgeny Burikov Anomaly Pattern Recognition with Privileged Information for Broken Sensor Detection

Pisit Nakjai and Tatpong Katanyukul

Automatic Hand Sign Recognition: Identify Unusuality Through Latent Cognizance

Alexander Kuleshov, Alexander Bernstein and Evgeny Burnaev

Manifold Learning Regression with Non-Stationary Kernels