

Niki Martinel

ASSISTANT PROFESSOR · MACHINE LEARNING AND COMPUTER VISION

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The following CV is also available online

Main Research and Teaching Activities

Current Position and Roles

CURRENT POSITION

University of Udine

Udine, Italy

TENURED ASSISTANT PROFESSOR AT AVIREs/MLP LAB (UNIVERSITY OF UDINE) - MACHINE LEARNING AND COMPUTER

Jan 2019 - To Date

VISION

Recent Activities:

- Outstanding Reviewer for ECCV2020
- Contributed to the self-supervised learning paper “Is It a Plausible Colour? UCapsNet for Image Colourisation”. Paper accepted at the Neural Information Processing (NeurIPS) Workshops 2020 - Self-Supervised Learning Theory And Practice
- Contributed to the visual tracking paper “An Exploration of Target-Conditioned Segmentation Methods for Visual Object Trackers”. Paper accepted at the European Conference on Computer Vision (ECCV) Workshops - Visual Object Tracking Challenge – VOT2020
- Co-Principal Investigator for the accepted ONR Grant N62909-20-1-2075 entitled “Target Re-Association for Autonomous Agents” (TRAAA)
- Responsible for the PRESNET WP regarding the video analysis/machine learning for autonomous UAV control. Funded by the Italy/Singapore Ministry of Defense.

INTERNATIONAL ROLES

Italian IAPR chapter

Firenze, Italy

DEPUTY CHIEF FOR THE NEURAL NETWORKS AND DEEP LEARNING TECHNICAL COMMITTEE

September 2017 - To Date

Creating a network of people that will guide new and young members through the challenges and existing approaches of deep neural networks (deep learning).

NATO

Bruxelles, Belgium

MEMBER OF THE NATO ACTIVITY IST-169 ROBUSTNESS AND ACCOUNTABILITY IN MACHINE LEARNING SYSTEM

August 2018 - To Date

Determine the state-of-the-art in robustness and accountability for deep learning systems with complex and large models which are virtually impossible to manage by humans.

NATO

Bruxelles, Belgium

MEMBER OF THE NATO ACTIVITY IST-ET-113 UNSUPERVISED MACHINE LEARNING IN THE MILITARY DOMAIN

December 2019 - To Date

Define the state-of-the-art in unsupervised machine learning systems and set the stepping-stones for the future directions in the military domain.

Teaching and Research

TEACHING AT INTERNATIONAL SCHOOLS

IAPR

Italy

TEACHER

2016 - To Date

Invited to offer machine learning-related classes at the International Doctorate School entitled “Scuola di Visione delle Macchine” (2016) / International Summer School on Artificial Intelligence - From Deep Learning to Data Analytics (2018, 2019).

TEACHING

National and International Universities

TEACHER

Italy/Austria

2011 – To Date

More than 11 teaching activities on bachelor, master and doctoral computer science courses offered by the University of Udine (Italy) and the Alpen-Adria University of Klagenfurt (Austria).

DOCTORATE SCHOOL ORGANIZER

International Schools

LOCAL CHAIR

Italy

2016-To Date

Organizer of the 2016 edition of the International Doctorate School entitled “Scuola di Visione delle Macchine” promoted by the Italian IAPR Chapter and of the 2018-2020 International Summer School on Artificial Intelligence (AI-DLDA).

DOCTORATE THESIS REFEREE

University of Alcalá de Henares

Alcalá de Henares, Spain

INTERNATIONAL REFEREE

2015

International member of the evaluation committee for award of the International Doctor of Philosophy Degree in Electronics, department of Electronics, University of Alcalá de Henares, Spain, 2015.

University of Alcalá de Henares

Alcalá de Henares, Spain

INTERNATIONAL REFEREE

2016

International member of the evaluation committee for award of the International Doctor of Philosophy Degree in Electronics, department of Electronics, University of Alcalá de Henares, Spain, 2016.

INTERNATIONAL JOURNAL EDITOR

Elsevier Microprocessors and Microsystems International Journal

Elsevier

HANDLING/ASSOCIATE EDITOR

2020

Handling/Associate editor for the International Journal on Microprocessors and Microsystem.

IEEE/IET CAAI Transactions on Intelligence Technology

IEEE/IET

ASSOCIATE EDITOR

2016

Associate editor for the International IEEE-IET Journal CAAI Transactions on Intelligence Technology.

INTERNATIONAL RESEARCH

University of California at Riverside

Riverside, CA, USA

VISITING RESEARCHER

2014 – 2016

Junior specialist (2012–2013) and visiting assistant project scientist (2016) working on projects funded by the Office of Naval Research (ONR) and by the National Science Foundation (NSF).

Alpen-Adria University of Klagenfurt

Klagenfurt, Austria

VISITING PROFESSOR

2020

Visiting professor for guest lectures series on Artificial Vision.

Alpen-Adria University of Klagenfurt

Klagenfurt, Austria

VISITING PROFESSOR

2018

Visiting professor for guest lectures series on Artificial Vision.

RESEARCH COLLABORATIONS

National and International Universities

Italy/Slovenia/USA/Australia

RESEARCHER

2012 – To Date

Collaborations with national and international universities including: University of Firenze, University of Ljubljana, University of Boston, University of California at Riverside, Queensland University of Technology, University of Adelaide.

INTERNATIONAL CONFERENCE ORGANIZATION

International Conference on Distributed Smart Cameras

Eindhoven, The Netherlands

MULTIMEDIA CHAIR

2018

Multimedia chair for the 12th International Conference on Distributed Smart Cameras, held in Eindhoven, The Netherlands.

International Conference on Distributed Smart Cameras

Venice, Italy

PUBLICATION CHAIR

2014

Publication chair for the 8th International Conference on Distributed Smart Cameras, held in Venice, Italy.

IEEE/ACM/Springer

TECHNICAL PROGRAM COMMITTEE

2013 - To Date

Member of the technical program committee of various top-notch computer vision and machine learning international conferences and workshops (e.g., WACV/ECCV/ICCV/CVPR/AAAI).

INVITED PRESENTATIONS AND SEMINARS

International Universities

SEMINARS

2015 - To Date

Invited to present current and past research activities at different International Universities, including the University of Ljubljana (Slovenia) and the University of Massachusetts at Lowell (Massachusetts, USA).

TECHNOLOGICAL TRANSFER

Eye-Tech Srl

MEMBER

2016 - To Date

Member of a spin-off of the University of Udine.

REVIEWING ACTIVITIES

IEEE/ACM/Springer

REVIEWER

2014 - To Date

Reviewer and member of the technical program committee of top-notch international conferences.

IEEE/ACM/Elsevier/IET/SPIE

REVIEWER

2014 - To Date

Reviewer for prestigious international computer vision and machine learning-related journals.

COMPETITIVE RESEARCH PROJECTS

University of Udine

Udine, Italy

WP/TECHNICAL RESPONSIBLE

2010 - To Date

CoPI, WP responsible and unit member for 7 international and 5 national projects.

PUBLICATIONS

IEEE/ACM/Elsevier/Springer

AUTHOR/CO-AUTHOR

2010 - To Date

Author or co-author of more than 20 international journal papers, 35 papers published in international conferences proceedings and 3 book chapters.

IEEE/ACM

AWARDS

2014 - To Date

- Ranked among the **top reviewers for ECCV 2020**.
- Main author of the paper entitled "Unsupervised Hashing with Neural Trees for Image Retrieval and Person Re-Identification" by N. Martinel, G. L. Foresti and C. Micheloni, nominated for the **Best Paper Award** at the International Conference on Distributed Smart Cameras (2018)
- Main author of the paper entitled "Distributed and Unsupervised Cost-Driven Person Re-identification" by N. Martinel, G. L. Foresti and C. Micheloni, receiving the **Best Industry Related Paper Award** at the International Conference on Pattern Recognition (2016)
- Main author of the paper entitled "Sparse Matching of Random Patches for Person Re-Identification" by N. Martinel and C. Micheloni, receiving the **Best Paper Award** at the International Conference on Distributed Smart Cameras (2014)

RESEARCH QUALITY

Bibliometric Indicators

AUTHOR

2012 - To Date

- **Scopus:** h - index = 15 - citations = 608
- **Google Scholar:** h - index = 21 - i10 - index = 33 - citations = 1309

Dr. Martinel has received the "Abilitazione Scientifica Nazionale" for the Associate Professor position for the scientific sectors 01/B1 and 09/H1.

Detailed List

Education

University of Udine

PH.D. IN INDUSTRIAL AND INFORMATION ENGINEERING

Udine, Italy

May 2014 - May 2017

- Thesis entitled “Biologically-Inspired Hierarchical Learning Architectures for Image Classification”.
Supervisor: Prof. Gian Luca Foresti
Università degli Studi di Udine, May 22, 2017, pp. 155

University of Udine

PH.D. IN MULTIMEDIA COMMUNICATION

Udine, Italy

January 2011 - April 2014

- Thesis entitled “A Distributed Video Surveillance System to Track Persons in Camera Networks”.
Supervisor: Dr. Christian Micheloni
Università degli Studi di Udine, April 9, 2014, pp. 163.

University of Udine

MASTER DEGREE IN MULTIMEDIA COMMUNICATION

Udine, Italy

October 2008 - November 2010

- Thesis entitled “Design and Development of a Dynamic User Interface for Video Surveillance Systems”.
Supervisors: Dr. Christian Micheloni and Prof. Gian Luca Foresti
Università degli Studi di Udine, November 2010, pp. 234.
- Mark: 110/110 *cum laude*.

University of Udine

BACHELOR DEGREE IN MULTIMEDIA SCIENCE AND TECHNOLOGIES

Udine, Italy

September 2005 - September 2008

- Thesis entitled “A Portal Designed for Querying XML Documents”.
Supervisors: Dr. Demis Ballis and Dr. Michele Baggi
Università degli Studi di Udine, September 2008, pp. 200.
- Mark: 104/110.

International Schools

University of Cambridge, UK / University of Catania, Italy

INTERNATIONAL COMPUTER VISION SUMMER SCHOOL ICVSS 2011 - REGISTRATION, RECOGNITION AND RECONSTRUCTION
IN IMAGES AND VIDEO

Scicli, Italy

July 2011

University of Modena and Reggio Emilia / IAPR

INTERNATIONAL SHORT SPRING SCHOOL ON SURVEILLANCE - S4

Modena, Italy

May 2011

International Experiences

University of California, Riverside, CA

ASSISTANT PROJECT SCIENTIST - SUPERVISOR: PROF. AMIT K. ROY-CHOWDHURY

Riverside, CA, USA

January 2016 - March 2016

Leading a project module on person re-identification

- Implemented a human-in-the-loop method that yields incremental learning. This is used to perform temporal model (metric learning) adaptation
- Other investigated topics: metric learning; deep learning; convex optimization; active learning; incremental learning

University of California, Riverside, CA

JUNIOR SPECIALIST - SUPERVISOR: PROF. AMIT K. ROY-CHOWDHURY

Riverside, CA, USA

September 2012 - April 2013

Jointly working on a project module on person re-identification

- Implemented an approach that tackles the re-identification objective by performing classification of pairwise camera-dependent visual feature transformations
- Other investigated topics: feature transformation; unsupervised manifold learning; machine learning; deep learning; convex/distributed optimization

Teaching Activities

Alpen-Adria University at Klagenfurt

ARTIFICIAL VISION

Teacher for the master/doctorate short course offered by the Institute of Networked and Embedded Systems

Klagenfurt, Austria

May 2020

University of Udine

SMART NETWORKED DEVICES

Teacher for the master course in Multimedia and Information Technology

Udine, Italy

2019 - 2020

University of Udine

MULTIMEDIA DATA MANAGEMENT LAB

Teacher for the bachelor course in Multimedia and Science Technologies

Udine, Italy

2019 - 2020

University of Udine

MULTIMEDIA DATA MANAGEMENT LAB

Teacher for the bachelor course in Multimedia and Science Technologies

Udine, Italy

2018 - 2019

International Summer School on Artificial Intelligence: From Deep Learning to Data Analytics (AI-DLDA)

TOWARDS HUMAN-LEVEL IMAGE UNDERSTANDING WITH DEEP LEARNING

Invited teacher for the International Doctorate School

Udine, Italy

June 2019

Alpen-Adria University at Klagenfurt

ARTIFICIAL VISION

Teacher for the master/doctorate course offered by the Institute of Networked and Embedded Systems

Klagenfurt, Austria

June 2018

International Summer School on Artificial Intelligence: From Deep Learning to Data Analytics (AI-DLDA)

TOWARDS HUMAN-LEVEL IMAGE UNDERSTANDING WITH DEEP LEARNING

Invited teacher for the International Doctorate School

Udine, Italy

July 2018

University of Udine

MACHINE LEARNING

Commissioned teacher for the master course in Computer Science – International Degree

Udine, Italy

2017 - 2018

University of Udine

SMART VISION AND SENSOR NETWORKS

Commissioned teacher for the master course in Computer Science – International Degree

Udine, Italy

2017 - 2018

Istituto Tecnico Superiore ITS - Kennedy

INTRODUCTION TO PROBABILITY

Teacher

Pordenone, Italy

2017

University of Udine

MACHINE LEARNING

Commissioned teacher for the master course in Computer Science – International Degree

Udine, Italy

2016 - 2017

University of Udine

3D COMPUTER GRAPHICS

Commissioned teacher for the master course in Computer Science – International Degree

Udine, Italy

2016 - 2017

University of Udine

SMART VISION AND SENSOR NETWORKS

Commissioned teacher for the master course in Computer Science – International Degree

Udine, Italy

2016 - 2017

International Machine Vision Summer School (VISMAC)

MACHINE/DEEP LEARNING INTRODUCTION

Invited teacher for the international doctorate school

Pordenone/Grado, Italy

June 2016

University of Udine

MACHINE LEARNING

Commissioned teacher for the master course in Computer Science – International Degree

Udine, Italy

2015 - 2016

University of Udine

3D COMPUTER GRAPHICS

Commissioned teacher for the master course in Computer Science – International Degree

Udine, Italy

2015 - 2016

University of Udine

SMART VISION AND SENSOR NETWORKS

Commissioned teacher for the master course in Computer Science – International Degree

Udine, Italy

2015 - 2016

University of Udine

3D COMPUTER GRAPHICS

Teaching assistant for the master course in Multimedia Communication and Information Technologies

Udine, Italy

2013 - 2014

University of Udine

VIDEO PROCESSING AND TRANSMISSION

Teaching assistant for the master course in Multimedia Communication and Information Technologies

Udine, Italy

2013 - 2014

University of Udine

SECURITY IN MULTIMEDIA APPLICATIONS

Teaching assistant for the bachelor course in Multimedia Science and Technology

Udine, Italy

2013 - 2014

University of Udine

VIDEO PROCESSING AND TRANSMISSION

Teaching assistant for the master course in Multimedia Communication and Information Technologies

Udine, Italy

2011 - 2012

Working Experience

University of Udine

POST-DOC FELLOW - SUPERVISOR: PROF. GIAN LUCA FORESTI

Leading research projects on person re-identification and pattern recognition

- Proposed an aerial video surveillance system that exploits small-scale UAVs to perform environmental monitoring
- Designed a deep learning architecture for food recognition that exploits the vertical layer structure of food dishes
- Proposed a re-identification solution that transfer the knowledge available in the single-person re-identification domain to the group re-identification one

Udine, Italy

May 2016 - Jan 2018

Eye-Tech S.r.l.

ADVISORY BOARD MEMBER - MACHINE LEARNING EXPERT

Leading R&D projects on Machine Learning and Computer Vision

- Design and implementation of a prototype software for the automatic evaluation of goalkeepers
- Design and implementation of an automatic food understanding approach for embedded platforms
- Re-designed the Eye-D software to control the access of sensible areas through biometric identification
- Supervised the design and engineering of the Smart Person Identification software

Pordenone, Italy

December 2015 - May 2017

University of Udine

POST-DOC FELLOW - SUPERVISOR: PROF. GIAN LUCA FORESTI

Leading research projects on person re-identification and pattern recognition

- Proposed a real-time incremental and geo-referenced solution to build robust mosaicks by means of small-scale UAVs
- Proposed a stochastic optimization-based method to temporally adapt a metric learning model with human in the loop
- Designed a neural tree-based solution that borrows from neural networks and extreme learning machines to self-discover the optimal architecture
- Implemented a person re-identification framework that optimizes the network resources and largely improves the performances of existing solutions

Udine, Italy

June 2015 - May 2016

University of Udine

POST-DOC FELLOW - SUPERVISOR: PROF. GIAN LUCA FORESTI

Leading research projects on person re-identification

- Designed a re-ranking solution that discovers the visual similarities shared between similar persons and removes them to focus on the relevant re-identification details
- Designed a re-identification framework to fuse multiple experts re-identification decisions through a probabilistic scheme
- Proposed a framework that exploits visual saliency and learns multiple metrics between different image features

Udine, Italy

February 2014 - May 2015

University of Udine

COMPUTER VISION EXPERT - SUPERVISOR: PROF. GIAN LUCA FORESTI

Unit Leader for the development of a mosaicking software for aerial images acquired by low altitude Unmanned Aerial Vehicles (UAVs). National Project ADVISOR III.

- Supervised the software engineering
- Designed the incremental stitching computer vision solution that exploits GPS-coordinates to perform real time operations

Udine, Italy

October 2013 - March 2014

InfoFactory S.r.l.

COMPUTER SYSTEMS ANALYST, DESIGNER AND DEVELOPER

Design of Graphical User Interface for the SRSNet Project funded by the European Commission

- Designed the User Interface through Human-Computer Interaction evaluation procedures
- Development of the computer vision solution to track the targets across different overlapping cameras

Udine, Italy

June 2010 - December 2011

MEDIASTUDIO S.r.l.

COMPUTER SYSTEMS ANALYST, DESIGNER AND DEVELOPER

Design of Graphical User Interface for 3D Software | Design and development of mobile applications

- Development of mobile applications for the design of customized kitchens
- Re-design and re-engineering of the graphical user interface of the software product used to design customized kitchens

Pordenone, Italy

April 2009 - December 2010

MEDIASTUDIO S.r.l.

COMPUTER SYSTEMS ANALYST, DESIGNER AND DEVELOPER

Design of Graphical User Interface for 3D Software

- Re-design and re-engineering of the graphical user interface of the software product used to create/draw kitchens objects (i.e., a Computer Aided Design software)

Pordenone, Italy

March 2008 - March 2009

FotocolorMartinelli S.n.c.

GRAPHIC DESIGNER

Photo retouching | Dealer

Maniago, PN, Italy

June 2008 - September 2008

FotocolorMartinelli S.n.c.

GRAPHIC DESIGNER

Photo retouching | Dealer

Maniago, PN, Italy

June 2007 - September 2007

National and International Collaborations

University of Adelaide

PROF. GUSTAVO CARNIERO

Collaborations with Prof. Gustavo Carniero on reinforcement learning for visual tracking

Adelaide, Australia

2018 - To Date

Queensland University of Technology

DR. DAVIDE FONTANAROSA

Collaborations with Dr. Davide Fontanarosa on visual tracking in ultrasound images and robotics for surgery applications

Brisbane, Australia

2018 - To Date

University of Firenze

PROF. ALBERTO DEL BIMBO

Collaborations with Prof. Alberto del Bimbo on re-identification solutions proposing single-to-group transfer learning approaches

Firenze, Italy

2016 - To Date

University of Pavia

DR. GIUSEPPE LISANTI

Collaborations with Dr. Giuseppe Lisanti on re-identification solutions proposing single-to-group transfer learning approaches

Firenze, Italy

2016 - To Date

University of Ljubljana

PROF. DANJIEL SKOCAJ

Collaborations with Prof. Danjuel Skocaj on incremental learning solutions

Ljubljana, Slovenia

2015 - To Date

University of Alcalá de Henares

PROF. ALFREDO GARDEL VICENTE

Collaborations with Prof. Alfredo Gardel Vicente investigating re-ranking schemes for person re-identification

Alcalá de Henares, Spain

2014 - To Date

Indian Institute of Technology, Kharagpur

DR. ABIR DAS

Collaborations with Dr. Abir Das on person re-identification solutions

Boston, CA, USA

2012 - To Date

University of California at Riverside

PROF. AMIT K. ROY-CHOWDHURY

Collaborations with Prof. Amit K. Roy-Chowdhury investigating person re-identification solutions grounded on human-in-the-loop and feature transformation techniques. Other investigated topics include: machine learning; deep learning; convex optimization; active learning.

Riverside, CA, USA

2012 - To Date

International Research Projects

Office of Naval Research

CO-PRINCIPAL INVESTIGATOR (CoPI) FOR THE RESEARCH PROJECT "TARGET RE-ASSOCIATION FOR AUTONOMOUS AGENTS" (TRAAA)

USA

2020 - To Date

European Community – Marie Curie European Training Network project

MEMBER OF THE RESEARCH UNIT OF THE UNIVERSITY OF UDINE: ADVANCED HARDWARE/SOFTWARE COMPONENTS FOR INTEGRATED/EMBEDDED VISION SYSTEMS (ACHIEVE)

EU

2017 - To Date

Italian/Singapore Ministry of Defense

MEMBER/WP RESPONSIBLE OF THE RESEARCH UNIT OF THE UNIVERSITY OF UDINE: PRESCRIPTIVE SITUATIONAL AWARENESS FOR COOPERATIVE AUTO-ORGANIZING AERIAL SENSOR NETWORKS (PRESNET)

Rome, Italy / Singapore, Singapore

2016 - To Date

National Science Foundation

MEMBER OF THE RESEARCH TEAM WORKING ON THE NATIONAL SCIENCE FOUNDATION PROJECT ENTITLED "MULTIROBOT-HUMAN COORDINATION FOR VISUAL SCENE UNDERSTANDING" – IIS-1316934

Riverside, CA, USA

2016

European Community – Interreg IV research project

MEMBER OF THE RESEARCH UNIT OF THE UNIVERSITY OF UDINE: SMART RESOURCE-AWARE MULTI-SENSOR NETWORK (SRSNET)

EU

2011 - 2012

European Community – Transnational Cooperation Programme EU-SEE/A/426/1

MEMBER OF THE RESEARCH UNIT OF THE UNIVERSITY OF UDINE: INTER-REGIONAL COOPERATION FOR VALORISATION OF R&D RESULTS (INTERVALUE)

EU

2009 - 2012

European Defense Agency – Defence R&T Joint Investment Programme on Force Protection - Project A-0444-RT-GC

MEMBER OF THE RESEARCH UNIT OF THE UNIVERSITY OF UDINE: DISTRIBUTED AND ADAPTIVE MULTISENSOR FUSION ENGINE (DAFNE)

EU

2009 - 2011

European Defense Agency – Defense R&T Joint Investment Program on Force Protection – Project A-0380-RT-GC

MEMBER OF THE RESEARCH UNIT OF THE UNIVERSITY OF UDINE: MULTI-SENSOR ANTISNIPEER SYSTEM (MUSAS)

EU

2007 - 2010

National Research Projects

Italian Ministry of Defense

MEMBER/TECHICAL RESPONSIBLE OF THE RESEARCH UNIT OF THE UNIVERSITY OF UDINE: A PROACTIVE COUNTER-UAV SYSTEM TO PROTECT ARMY TANKS AND PATROLS IN URBAN AREAS (PROACTIVE COUNTER-UAV)

Rome, Italy

2019 - To Date

Friuli Venezia-Giulia Region / beanTech Srl

MEMBER/TECHICAL RESPONSIBLE OF THE RESEARCH UNIT OF THE UNIVERSITY OF UDINE: SMART MACHINE BOX (SMB)

Trieste, Italy

2018 - To Date

Friuli Venezia-Giulia Region / Wartsila Spa

MEMBER/TECHICAL RESPONSIBLE OF THE RESEARCH UNIT OF THE UNIVERSITY OF UDINE: ADVANCED TRACKING OF TECHNICAL PERSONNEL THROUGH AUGMENTED REALITY

Trieste, Italy

2018 - To Date

Friuli Venezia-Giulia Region / Rosa Plast Srl

MEMBER/TECHICAL RESPONSIBLE OF THE RESEARCH UNIT OF THE UNIVERSITY OF UDINE: COLLABORATIVE DESIGN WITH MIXED REALITY

Trieste, Italy

2018 - To Date

Friuli Venezia-Giulia Region / Nuova Contec Srl

MEMBER/TECHICAL RESPONSIBLE OF THE RESEARCH UNIT OF THE UNIVERSITY OF UDINE: INTEGRATED VIDEO ANALYTICS SYSTEM FOR THE INSPECTION OF SEWER PIPES (SVIPCF)

Trieste, Italy

2016 - 2017

Italian Ministry of Defense

MEMBER/TECHICAL RESPONSIBLE OF THE RESEARCH UNIT OF THE UNIVERSITY OF UDINE: AUGMENTED REALITY FOR MOBILE APPLICATIONS: NAVIGATION SUPPORT FOR MILITARY PATROLS IN HIGH RISK AREAS, ADVANCED VISUALIZATION OF INTEREST POINTS IN TOURISTIC APPLICATIONS AND INTELLIGENT RECOGNITION OF EXPLOSIVE REMNANT OF WAR (RA2M)

Rome, Italy

2015 - To Date

Italian Ministry of Defense/Friuli Venezia-Giulia Region

MEMBER/TECHICAL RESPONSIBLE OF THE RESEARCH UNIT OF THE UNIVERSITY OF UDINE: PROACTIVE ARTIFICIAL VISION FOR ADVANCED UAV SYSTEMS FOR PROTECTION OF MILITARY UNITS, TERRITORIAL CONTROL AND ENVIRONMENTAL PREVENTION (SUPREME)

Rome/Trieste, Italy

2015 - To Date

Italian Ministry of Defense

MEMBER OF THE RESEARCH UNIT OF THE UNIVERSITY OF UDINE: SYSTEM DEPLOYMENT AND AUTOMATIC NETWORK RECONFIGURATION OF MOBILE SENSORS ON UAVS FOR THE PROTECTION OF CONVOYS, PATROLS AND MILITARY INSTALLATIONS OF (ADVISOR III)

Rome, Italy

2011 - 2013

Italian Ministry of Defense

MEMBER OF THE RESEARCH UNIT OF THE UNIVERSITY OF UDINE: AN ADVANCED MODEL FOR AUTONOMOUS RECONFIGURATION OF A NETWORK OF ACTIVE SENSORS FOR PROTECTION OF MILITARY CAMPS IN ABROAD MISSIONS (ADVISOR II)

Rome, Italy

2008 - 2011

Industrial Projects

Sim2 Multimedia S.p.a.

PROJECT MANGER: DESIGN OF GRAPHICAL USER INTERFACE DEVELOPMENT OF AN ADOBE FLASH[®]-BASED DYNAMIC SYSTEM DIGITAL NETWORK MANAGEMENT
Interfaces and Media Content for a Dynamic Digital Signage Network

Pordenone, Italy

2009 - 2010

Journal Editor

Elsevier Microprocessors and Microsystems International Journal

HANDLING/ASSOCIATE EDITOR

Handling/Associate editor for the International Journal on Microprocessors and Microsystem.

Elsevier

2020

IEEE/IET CAAI Transactions on Intelligence Technology

ASSOCIATE EDITOR

Associate editor for the International IEEE-IET Journal CAAI Transactions on Intelligence Technology.

IEE/IET

2016

Reviewing Activities

IEEE

- JOURNAL OF SELECTED TOPICS IN SIGNAL PROCESSING
- TRANSACTIONS ON PATTERN ANALYSIS AND MACHINE INTELLIGENCE
- TRANSACTIONS ON IMAGE PROCESSING
- TRANSACTIONS ON CYBERNETICS
- TRANSACTIONS ON CIRCUITS AND SYSTEMS FOR VIDEO TECHNOLOGY
- TRANSACTIONS ON INFORMATION FORENSICS AND SECURITY
- TRANSACTIONS ON MULTIMEDIA
- SIGNAL PROCESSING LETTERS
- ROBOTICS AND AUTOMATION LETTERS
- IEEE ACCESS

Elsevier

- IMAGE AND VISION COMPUTING
- PATTERN RECOGNITION
- COMPUTER VISION AND IMAGE UNDERSTANDING
- PATTERN RECOGNITION LETTERS
- SIGNAL PROCESSING: IMAGE COMMUNICATION
- JOURNAL OF VISUAL COMMUNICATION AND IMAGE REPRESENTATION REGISTRATION
- INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATIONS
- KNOWLEDGE-BASED SYSTEMS
- 3D RESEARCH

ACM

- TRANSACTION ON SENSOR NETWORKS

Springer

- THE VISUAL COMPUTER

IET

- COMPUTER VISION
- IMAGE PROCESSING

SPIE

- JOURNAL OF ELECTRONICAL IMAGING
- OPTICAL ENGINEERING

International Conference Organization

SPECIAL SESSION CHAIR

International Conference on Image Analysis and Processign (ICIAP)

Lecce, Italy
September 2021

MULTIMEDIA CHAIR

ACM International Conference on Distributed Smart Cameras (ICDSC)

Eindhoven, The Netherlands
September 2018

ACM International Conference on Distributed Smart Cameras (ICDSC)

Stanford, CA, USA
September 2017

PUBLICATION CHAIR

IEEE/ACM International Conference on Distributed Smart Cameras (ICDSC)

Venice, Italy
November 2014

LOCAL CHAIR

International Machine Vision Summer School (VISMAC)

Pordenone/Grado, Italy
June 2016

International Conference for the Italian Chapter on Pattern Recognition (GIRPR)

Grado (UD), Italy
June 2016

AREA CHAIR

International Conference on Pattern Recognition (ICPR)

Milano, Italy
January 2021

TECHNICAL PROGRAM COMMITTEE

IEEE International Conference on Computer Vision and Pattern Recognition (CVPR)

Virtual
June 2021

AAAI Conference on Artificial Intelligence (AAAI)

Virtual
February 2021

IEEE International Conference on Winter Applications of Computer Vision (WACV)

Virtual
January 2021

Asian Conference on Computer Vision (ACCV)

Kyoto, Japan
November-December 2020

European Conference on Computer Vision (ECCV)

Edinburgh, Scotland
August 2020

IEEE International Conference on Computer Vision and Pattern Recognition (CVPR)

Seattle WA, USA
June 2020

AAAI Conference on Artificial Intelligence (AAAI)

New York NY, USA
February 2020

IEEE International Conference on Robotics and Automation (ICRA)

Paris, France
May-June 2020

IEEE International Conference on Computer Vision (ICCV)

Seoul, South Korea
October-November 2019

IEEE International Conference on Computer Vision and Pattern Recognition (CVPR)

Long Beach CA, USA
June 2019

IEEE International Conference on Distributed Smart Cameras (ICDSC)

Trento, Italy
September 2019

IEEE International Conference on Robotics and Automation (ICRA)

Montreal, Canada
May 2019

IEEE International Conference on Winter Applications of Computer Vision (WACV)

Waikoloa Village, HI, USA
January 2019

IEEE International Conference on Distributed Smart Cameras (ICDSC)

Eindhoven, The Netherlands
September 2018

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| International Conference on Pattern Recognition (ICPR) | <i>Beijing, China</i> August 2018 |
| IEEE International Conference on Winter Applications of Computer Vision (WACV) | <i>Lake Tahoe, CA, USA</i> March 2018 |
| International Workshop on on Cross-domain Human Identification (CHI) | <i>Venice, Italy</i> October 2017 |
| International Workshop on Multimedia Assisted Dietary Management (MADIMA) | <i>Catania, Italy</i> December 2017 |
| IEEE International Conference on Image Processing Theory, Tools and Applications (IPTA) | <i>Montreal, Canada</i> December 2017 |
| IEEE International Conference on Computer Vision (ICCV) | <i>Venice, Italy</i> October 2017 |
| International Workshop on Assistive Computer Vision and Robotics (ACVR) | <i>Venice, Italy</i> October 2017 |
| IEEE International Conference on Distributed Smart Cameras (ICDSC) | <i>Stanford, CA, USA</i> September 2017 |
| International Symposium on Image and Signal Processing and Analysis (ISPA) | <i>Ljubljana, Slovenia</i> September 2017 |
| IEEE International Conference on Advanced Video and Signal based Surveillance (AVSS) | <i>Lecce, Italy</i> September 2017 |
| IEEE International Conference on Winter Applications of Computer Vision (WACV) | <i>Santa Rosa, CA, USA</i> March 2017 |
| International Conference on Pattern Recognition (ICPR) | <i>Cancun, Mexico</i> December 2016 |
| IEEE International Workshop on Assisted Computer Vision for Robotics (ACVR) - in Conjunction with ECCV | <i>Amsterdam, The Netherlands</i> October 2016 |
| ACM International Conference on Distributed Smart Cameras (ICDSC) | <i>Paris, France</i> September 2016 |
| ACM International Conference on Distributed Smart Cameras (ICDSC) | <i>Seville, Spain</i> September 2015 |
| IEEE/ACM International Conference on Distributed Smart Cameras (ICDSC) | <i>Venice, Italy</i> November 2014 |

Machine Learning

- NEURAL NETWORKS/DEEP LEARNING, METRIC LEARNING, NEURAL TREES, EXTREME LEARNING MACHINES, SUPPORT VECTOR MACHINES, DICTIONARY LEARNING, INCREMENTAL LEARNING, DIMENSIONALITY REDUCTION, OPTIMIZATION
- ENVIRONMENTS/TOOLS: PYTORCH, TORCH, TENSORFLOW, KERAS, PYTHON, C/C++, ANACONDA, SPYDER, PYCHARM, ZEROBRANE STUDIO, MATLAB

Computer Vision

- VISUAL UNDERSTANDING/RECOGNITION/DETECTION/TRACKING, FEATURE LEARNING, FEATURE EXTRACTION, FEATURE MATCHING, TEMPORAL ADAPTATIONS
- ENVIRONMENTS/TOOLS: PYTORCH, PYTHON, C#, C/C++, SPYDER, PYCHARM, MATLAB, VISUAL STUDIO

Unmanned vehicles

- UGV, UAV, AUTONOMOUS NAVIGATION, VISUAL ANALYTICS
- ENVIRONMENTS/TOOLS: ROS, PYTHON, C#, C/C++, SPYDER, PYCHARM, VISUAL STUDIO, ARDUINO, RASPBERRYPI

Programming

- LANGUAGES: PYTHON, C/C++, C#, OBJECTIVE-C, LUA, MATLAB, SQL
- ENVIRONMENTS/TOOLS: ANACONDA, SPYDER, PYCHARM, VISUAL STUDIO, XCODE, ZEROBRANE STUDIO, SQL SERVER, MYSQL

Web

HTML5, AJAX, PHP, JAVASCRIPT, CSS, SQL

Languages

- ENGLISH: HIGHLY PROFICIENT IN SPOKEN AND WRITTEN
- ITALIAN: NATIVE

Scientific Associations / International Organizations

NATO

MEMBER OF THE NATO ACTIVITY IST-169 ROBUSTNESS AND ACCOUNTABILITY IN MACHINE LEARNING SYSTEM

Bruxelles, Belgium

August 2018 - To Date

NATO

MEMBER OF THE NATO ACTIVITY IST-ET-113 UNSUPERVISED MACHINE LEARNING IN THE MILITARY DOMAIN

Bruxelles, Belgium

December 2019 - To Date

IAPR

DEPUTY CHIEF FOR THE NEURAL NETWORKS AND DEEP LEARNING TECHNICAL COMMITTEE – INTERNATIONAL ASSOCIATION FOR PATTERN RECOGNITION, ITALIAN CHAPTER

2017 - To Date

IEEE

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS MEMBER

2011 - To Date

IAPR

MEMBER OF THE GRUPPO ITALIANO RICERCATORI IN PATTERN RECOGNITION (GIRPR) - AFFILIATED WITH INTERNATIONAL ASSOCIATION OF PATTERN RECOGNITION

2011 - To Date

Awards and Grants

Office of Naval Research (ONR)

RESEARCH GRANT

Grant for the project entitled “Target Re-Association for Autonomous Agents” (TRAAA)

Washington, D.C., USA

August 2020

European Conference on Computer Vision

OUTSTANDING REVIEWER

Award received for having provided more than 7 excellent reviews

Virtual

September 20

Office of Naval Research (ONR)

VISITING FELLOWSHIP

Grant for a Visiting Scientist Program

Washington, D.C., USA

February 2019

International Conference on Distributed Smart Cameras

BEST PAPER AWARD NOMINATION

Nomination received for the work entitled "Unsupervised Hashing with Neural Trees for Image Retrieval and Person Re-Identification" by N.

Martinel, G. L. Foresti and C. Micheloni

Eindhoven, The Netherlands

September 2018

NVIDIA Corporation

RESEARCH DONATION

Donation of an NVIDIA GPU for a research project on Unsupervised Learning with Neural Trees

Santa Clara, CA, USA

June 2018

International Conference on Pattern Recognition

BEST INDUSTRY RELATED PAPER AWARD (BIRPA)

Award received for the work entitled "Distributed and Unsupervised Cost-Driven Person Re-identification" by N. Martinel, G. L. Foresti and C.

Micheloni

Cancun, Mexico

December 2016

International Conference on Pattern Recognition

BEST STUDENT PAPER AWARD CANDIDATE

"Distributed and Unsupervised Cost-Driven Person Re-identification" by N. Martinel, G. L. Foresti and C. Micheloni

Cancun, Mexico

December 2016

NVIDIA Corporation

RESEARCH DONATION

Donation of an NVIDIA GPU for a research project on Neural Trees, Convolutional Neural Networks and Extreme Learning Machines

Santa Clara, CA, USA

May 2015

International Conference on Distributed Smart Cameras

BEST PAPER AWARD

Award received for the work entitled "Sparse Matching of Random Patches for Person Re-Identification" by N. Martinel and C. Micheloni

Venice, Italy

September 2014

Invited Seminars and Talks

Deep Learning Meetup

DEEP MACHINE VISION

Ljubljana, Slovenia

April 2019

Deep Learning Meetup

NUTS AND BOLTS OF MOBILE FOOD UNDERSTANDING

Ljubljana, Slovenia

April 2019

Office of Naval Research/National Research Laboratory

A JOURNEY INTO PERSON RE-IDENTIFICATION

Washington, D.C., USA

February 2019

University of Milano-Bicocca

BIOLOGICALLY-INSPIRED HIERARCHICAL LEARNING ARCHITECTURES FOR FOOD UNDERSTANDING

Milano, Italy

February 2018

University of Milano-Bicocca

FILL THE GAP FOR NON-CONTINUOUS LONG-TERM TRACKING

Milano, Italy

February 2018

University of Udine

DEEP LEARNING: STATE-OF-THE-ART AND PERSPECTIVES

Udine, Italy

September 2017

University of Massachusetts at Lowell

FILL THE GAP FOR NON-CONTINUOUS LONG-TERM TRACKING

Lowell, MA, USA

April 2016

Publications

INTERNATIONAL JOURNALS

Deep Pyramidal Pooling with Attention for Person Re-Identification

MARTINEL, N., FORESTI, G. L., AND MICHELONI, C.

2020

IEEE Transaction on Image Processing

Siam-U-Net: encoder-decoder siamese network for knee cartilage tracking in ultrasound images

DUNNHOFER, M., ANTICO, M., SASAZAWA, F., TAKEDA, Y., CAMPS, S., MARTINEL, N., MICHELONI, C., CARNIERO, G., AND

60, 2020

FONTANAROSA, D.

Medical Image Analysis

Deep Interactive Encoding with Capsule Networks for Image Classification

PUCCI, R., MICHELONI, C., FORESTI, G. L., AND MARTINEL, N.

2020

Multimedia Tools and Applications

From person to group re-identification via unsupervised transfer of sparse features

LISANTI, G., MARTINEL, N., MICHELONI, C., DEL BIMBO, A., AND FORESTI, G. L.

83-84, 2019

Image and Vision Computing

Distributed person re-identification through network-wise rank fusion consensus

MARTINEL, N., FORESTI, G. L., AND MICHELONI, C.

6, 2019

Pattern Recognition Letters

Coverage Control of Multiple Unmanned Aerial Vehicles: A Short Review

HUANG, S., TEO, R., LEONG, W., MARTINEL, N., FORESTI, G. L., AND MICHELONI, C.

6(2), 2018

Unmanned Systems

Accelerated Low-Rank Sparse Metric Learning for Person Re-Identifications

MARTINEL, N.

112, 2018

Pattern Recognition Letters

A UAV Video Dataset for Mosaicking and Change Detection From Low-Altitude Flights

AVOLA, D., CINQUE, L., FORESTI, G. L., MARTINEL, N., PANNONE, D., AND PICIARELLI, C.

To Appear, 2018

IEEE Transactions on Systems, Man, and Cybernetics: Systems

Person Re-Identification in a Distributed Camera Network Framework

MARTINEL, N., FORESTI, G. L., AND MICHELONI, C.

47 (11), 2017

IEEE Transactions on Cybernetics

Discriminant Context Information Analysis for Post-Ranking Person Re-Identification

GARCÍA, J., MARTINEL, N., GARDEL, A., BRAVO, I., FORESTI, G. L., AND MICHELONI, C.

26(4), 2017

IEEE Transactions on Image Processing

A Pool of Multiple Person Re-Identification Experts

MARTINEL, N., MICHELONI, C., AND FORESTI, G. L.

71, 2016

Pattern Recognition Letters

Modeling feature distances by orientation driven classifiers for person re-identification

GARCÍA, J., MARTINEL, N., GARDEL, A., BRAVO, I., FORESTI, G. L., AND MICHELONI, C.

38, 2016

Journal of Visual Communication and Image Representation

A supervised extreme learning committee for food recognition

MARTINEL, N., PICIARELLI, C., AND MICHELONI, C.

148, 2016

Computer Vision and Image Understanding

Re-Identification in the Function Space of Feature Warps

MARTINEL, N., DAS, A., MICHELONI, C., AND ROY-CHOWDHURY, A. K.

37(8), 2015

IEEE Transactions on Pattern Analysis and Machine Intelligence

The Evolution of Neural Learning Systems: A Novel Architecture Combining the Strengths of NTs, CNNs, and ELMs

MARTINEL, N., MICHELONI, C., AND FORESTI, G. L.
IEEE Systems, Man, and Cybernetics Magazine

1(3), 2015

Classification of Local Eigen-Dissimilarities for Person Re-Identification

MARTINEL, N., AND MICHELONI, C.
IEEE Signal Processing Letters

22(4), 2015

On a Distributed Video Surveillance System to Track Persons in Camera Networks

MARTINEL, N.
ELCVIA Electronic Letters on Computer Vision and Image Analysis

14(13), 2015

Kernelized Saliency-Based Person Re-Identification Through Multiple Metric Learning

MARTINEL, N., MICHELONI, C., AND FORESTI, G. L.
IEEE Transactions on Image Processing

24(12), 2015

Person re-identification by modelling principal component analysis coefficients of image dissimilarities

MARTINEL, N., AND MICHELONI, C.
Electronics Letters

50(14), 2014

Camera Selection for Adaptive Human-Computer Interface

MARTINEL, N., MICHELONI, C., PICIARELLI, C., AND FORESTI, G. L.
IEEE Transactions on Systems, Man, and Cybernetics: Systems

44(5), 2014

Robust Painting Recognition and Registration for Mobile Augmented Reality

MARTINEL, N., MICHELONI, C., AND FORESTI, G. L.
IEEE Signal Processing Letters

20(11), 2013

Multi-signature based person re-identification

MARTINEL, N., AND FORESTI, G. L.
Electronic Letters

48(13), 2012

INTERNATIONAL CONFERENCES

Is It a Plausible Colour ? UCapsNet for Image Colourisation

PUCCI, R., MICHELONI, C., FORESTI, G. L., AND MARTINEL, N.
Neural Information Processing Systems (NeurIPS) Workshops

Virtual
December, 2020

Tracking-by-Trackers with a Distilled and Reinforced Model

DUNNHOFER, M., MARTINEL, N., AND MICHELONI, C.
Asian Conference on Computer Vision Workshops (ACCV)

Virtual
November-December, 2020

Multi Branch Siamese Network for Person Re-Identification

MUNIR, A., MARTINEL, N., AND MICHELONI, C.
International Conference on Image Processing (ICIP)

Virtual
January, 2021

Self and Channel Attention Network for Person Re-Identification

MUNIR, A., MARTINEL, N., AND MICHELONI, C.
International Conference on Pattern Recognition (ICPR)

Virtual
January, 2021

Fixed Simplex Coordinates for Angular Margin Loss in CapsNet

PUCCI, R., MICHELONI, C., FORESTI, G. L., AND MARTINEL, N.
International Conference on Pattern Recognition (ICPR)

Virtual
January, 2021

Integrated Perception and Tactical Behaviours in an Auto-Organizing Aerial Sensor Network

LEONG, W. L., MARTINEL, N., HUANG, S., MICHELONI, C., FORESTI, G. L., AND TEO, R.
International Conference on Unmanned Aircraft Systems (ICAUS)

Athens, Greece
September, 2020

An Exploration of Target-Conditioned Segmentation Methods for Visual Object Trackers

DUNNHOFER, M., MARTINEL, N., AND MICHELONI, C.
European Conference on Computer Vision Workshops (ECCV)

Virtual
August, 2020

The Seventh Visual Object Tracking VOT2019 Challenge Results

KRISTAN, M., MATAS, J., LEONARDIS, A., FELSBURG, M., PFLUGFELDER, R., KAMARAINEN, J.-K., ..., ELDESOKEY, A.
International Conference on Computer Vision Workshops (ICCV)

Seoul, South Korea
October–November, 2019

Visual Tracking by means of Deep Reinforcement Learning and an Expert Demonstrator

DUNNHOFER, M., MARTINEL, N., FORESTI, G. L., AND MICHELONI, C.
International Conference on Computer Vision Workshops (ICCV)

Seoul, South Korea
October–November, 2019

An Exploration of the Interaction Between capsules with ResNetCaps models

PUCCI, R., MICHELONI, C., ROBERTO, V., FORESTI, G. L., AND MARTINEL, N.
International Conference on Distributed Smart Cameras (ICDSC)

Trento, Italy
September, 2019

An Efficient Artificial Intelligence Framework for UAV System

TOGOOTOGTOKH, E., HUANG, S., LEONG, W. L., TEO, R., FORESTI, G. L., MICHELONI, C., AND MARITNEL, N.
International Conference on Ubi-Media Computing (Ubi-Media)

Bali, Indonesia
August, 2019

Video-Based Convolutional Attention for Person Re-Identification

ZAMPROGNO, M., PASSON, M., MARTINEL, N., SERRA, G., MICHELONI, C., TASSO, C., AND FORESTI, G. L.
International Conference on Image Analysis and Processing (ICIAP)

Trento, Italy
September, 2019

Aggregating Deep Pyramidal Representations for Person Re-Identification

MARTINEL, N., FORESTI, G. L., AND MICHELONI, C.
International Conference on Computer Vision and Pattern Recognition (CVPR)

Long Beach, CA, USA
June, 2019

Unsupervised Smoke Detection in Normally Smoking Environments

CHINI, M., MARTINEL, N., DUNNHOFER, M., CESCHIA, C., AND MICHELONI, C.
International Conference on Distributed Smart Cameras (ICDSC)

Eindhoven, The Netherlands
September, 2018

Unsupervised Hashing with Neural Trees for Image Retrieval and Person Re-Identification

MARTINEL, N., FORESTI, G. L., AND MICHELONI, C.
International Conference on Distributed Smart Cameras (ICDSC)

Eindhoven, The Netherlands
September, 2018

Wide-Slice Residual Networks for Food Recognition

MARTINEL, N., FORESTI, G. L., AND MICHELONI, C.
International Winter Conference on Applications of Computer Vision (WACV)

Lake Tahoe, CA/NV, USA
March, 2018

Group Re-Identification via Unsupervised Transfer of Sparse Features Encoding

LISANTI, G., MARTINEL, N., DEL BIMBO, A., AND FORESTI, G. L.
International Conference on Computer Vision (ICCV)

Venice, Italy
October 2017

Person Re-Identification via Unsupervised Transfer of Learned Visual Representations

MARTINEL, N., DUNNHOFER, M., FORESTI, G. L., AND MICHELONI, C.
International Conference on Distributed Smart Cameras (ICDSC)

Stanford, CA, USA
September 2017

Temporally Smoothed Anomaly Detection in Continuous Fluids

CHINI, M., MARTINEL, N., SPAGNUL, S., AND MICHELONI, C.
International Conference on Distributed Smart Cameras (ICDSC)

Stanford, CA, USA
September 2017

Aerial Video Surveillance System for Small-Scale UAV Environment Monitoring

AVOLA, D., FORESTI, G. L., MARTINEL, N., MICHELONI, C., PANNONE, D., AND PICIARELLI, C.
International Conference on Advanced Video and Signal based Surveillance (AVSS)

Lecce, Italy
September 2017

Real-Time Incremental and Geo-Referenced Mosaicking by Small-Scale UAVs

AVOLA, D., FORESTI, G. L., MARTINEL, N., MICHELONI, C., PANNONE, D., AND PICIARELLI, C.
International Conference on Image Analysis and Processing (ICIAP)

Catania, Italy
September 2017

Distributed and Unsupervised Cost-Driven Person Re-identification

MARTINEL, N., FORESTI, G. L., AND MICHELONI, C.
International Conference on Pattern Recognition (ICPR)

Cancun, Mexico
December 2016

Temporal Model Adaptation for Person Re-Identification

MARTINEL, N., DAS, A., MICHELONI, C., AND ROY-CHOWDHURY, A. K.
European Conference on Computer Vision (ECCV)

Amsterdam, The Netherlands
October 2016

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| Mobile Food Recognition with an Extreme Deep Tree MARTINEL, N., PICIARELLI, C., FORESTI, G. L., AND MICHELONI, C. International Conference on Distributed Smart Cameras (ICDSC) | Paris, France September 2016 |
| A Structured Committee for Food Recognition MARTINEL, N., PICIARELLI, C., MICHELONI, C., AND FORESTI, G. L. International Conference on Computer Vision Workshops (ICCV) | Santiago, Chile December 2015 |
| Person Re-Identification Ranking Optimisation by Discriminant Context Information Analysis GARCIA, J., MARTINEL, N., MICHELONI, C., AND GARDEL, A. International Conference on Computer Vision (ICCV) | Santiago, Chile December 2015 |
| On Filter Banks of Texture Features for Mobile Food Classification MARTINEL, N., PICIARELLI, C., MICHELONI, C., AND FORESTI, G. L. International Conference on Distributed Smart Cameras (ICDSC) | Seville, Spain September 2015 |
| Selection of Temporal Features for Event Detection in Smart Security MARTINEL, N., AVOLA, D., PICIARELLI, C., MICHELONI, C., VERNIER, M., CINQUE, L., AND FORESTI, G. L. International Conference on Image Analysis and Processing (ICIAP) | Genoa, Italy September 2015 |
| Sparse Matching of Random Patches for Person Re-Identification MARTINEL, N., AND MICHELONI, C. International Conference on Distributed Smart Cameras (ICDSC) | Venice, Italy November 2014 |
| Mobile Re-Identification Based on Local Features Analysis AKHTAR, Z., MARTINEL, N., MICHELONI, C., AND FORESTI, G. L. International Conference on Distributed Smart Cameras (ICDSC) | Venice, Italy November 2014 |
| Saliency Weighted Features for Person Re-Identification MARTINEL, N., MICHELONI, C., AND FORESTI, G. L. European Conference Computer Vision Workshops and Demonstrations (ECCV) | Zürich, Switzerland September 2014 |
| Person Orientation and Feature Distances Boost Re-Identification GARCIA, J., MARTINEL, N., FORESTI, G. L., GARDEL, A., AND MICHELONI, C. International Conference on Pattern Recognition (ICPR) | Stockholm, Sweden August 2014 |
| Learning Pairwise Feature Dissimilarities for Person Re-Identification MARTINEL, N., MICHELONI, C., AND PICIARELLI, C. International Conference on Distributed Smart Cameras (ICDSC) | Palm Springs, CA, USA October-November 2013 |
| Remote Feature Learning for Mobile Re-Identification VERNIER, M., MARTINEL, N., MICHELONI, C., AND FORESTI, G. L. International Conference on Distributed Smart Cameras (ICDSC) | Palm Springs, CA, USA October-November 2013 |
| Outdoor environment monitoring with unmanned aerial vehicles PICIARELLI, C., MICHELONI, C., MARTINEL, N., VERNIER, M., AND FORESTI, G. L. International Conference on Image Analysis and Processing (ICIAP) | Naples, Italy September 2013 |
| Image Processing Supports HCI in Museum Application MARTINEL, N., VERNIER, M., FORESTI, G. L., AND LAMEDICA, E. International Conference on Computer Vision Theory and Applications (VISAPP) | Barcelona, Spain February 2013 |
| Distributed Signature Fusion for Person Re-Identification MARTINEL, N., MICHELONI, C., AND PICIARELLI, C. International Conference on Distributed Smart Camera (ICDSC) | Hong Kong, Hong Kong October-November 2012 |
| Re-identify people in wide area camera network MARTINEL, N., AND MICHELONI, C. International Conference on Computer Vision and Pattern Recognition (CVPR) | Providence, RI, USA June 2012 |
| Pre-Emptive camera activation for Video Surveillance HCI MARTINEL, N., MICHELONI, C., AND PICIARELLI, C. International Conference on Image Analysis and Processing (ICIAP) | Ravenna, Italy September 2011 |

BOOK CHAPTERS

Low-Level Feature Detectors and Descriptors for Smart Image and Video Analysis: A Comparative Study

AVOLA, D., CINQUE, L., FORESTI, G. L., MARTINEL, N., PANNONE, D., AND PICIARELLI, C.

Bridging the Semantic Gap in Image and Video Analysis – H. Kwaśnicka and L. C. Jain (Eds.)

Springer

2018

Distributed mobile computer vision: Advances, challenges and applications

MARTINEL, N., PRATI, A., AND MICHELONI, C

Distributed Embedded Smart Cameras: Architectures, Design and Applications – C. Bobda and S. Velipasalar (Eds.)

Springer

2014

Advanced artificial vision and mobile devices for new applications in learning, entertainment and cultural heritage domains

FORESTI, G. L., MARTINEL, N., MICHELONI, C., AND VERNIER, M.

Interdisciplinary Mechatronics: Engineering Science and Research Development – M. K. Habib and J. P. Davim (Eds.)

Wiley-ISTE

2013

I states, to be informed, in accordance with and for purposes of the Italian Art. 13 of Legislative Decree 196/2003, that the collected personal data will be treated, including by computer, in proceedings to which this declaration is made. Udine, January 13, 2021