



Consiglio  
Nazionale delle  
Ricerche



Istituto di Scienza e Tecnologie  
dell'Informazione "A. Faedo"

# ISTI Day(s)

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## Program at a glance

### Day 1, November 8<sup>th</sup>, 2022

- 14:00 - 14:10** Opening
- 14:10 - 14:30** Intervento di Emilio Campana (Direttore DIITET)
- 14:30 - 15:15** Tavola rotonda: Ricerca informatica e trasferimento tecnologico: quale ruolo del CNR nei processi di innovazione?
- 15:15 - 15:35** Intervento di Roberto Scopigno (Direttore ISTI)
- 15:35 - 16:15** Poster Session (part I)
- 16:15 - 17:35** Scientific Talks (part I)
- 17:35 - 17:40** Closing

### Day 2, November 15<sup>th</sup>, 2022

- 14:00 - 14:10** Opening
- 14:10 - 14:20** ISTI Awards
- 14:20 - 15:40** Scientific Talks (part II)
- 15:40 - 16:20** Poster Session (part II)
- 16:20 - 17:40** Scientific Talks (part III)
- 17:40 - 17:50** Closing

### Access via Zoom

<https://us02web.zoom.us/j/82274895945>

la password verrà comunicata tramite email qualche ora prima dell'inizio del meeting

## Day 1: November 8<sup>th</sup>, 2022

Schedule						
14:00 - 14:10	<b>Opening</b> <i>Coordinatori ISTI-Day</i>					
14:10 - 14:30	<b>Intervento del Direttore DIITET</b> <i>Emilio F. Campana</i>					
14:30 - 15:15	<b>Tavola rotonda: Ricerca informatica e trasferimento tecnologico: quale ruolo del CNR nei processi di innovazione?</b> <i>Leo Gizzi (INO-CNR, referente rapporti con industria per Area Ricerca Pisa), Alberto Messina (Head of R&amp;I Unit on TV Production presso Rai), Patrizia Alma Pacini (Presidente Unione Industriale Pisana), Andrea Piccaluga (Direttore Institute of Management S.S.S. Anna), Modera: Fabrizio Falchi (ISTI-CNR)</i>					
15:15 - 15:35	<b>Intervento del Direttore ISTI</b> <i>Roberto Scopigno</i>					
15:35 - 15:45	<b>Poster Fast Forward (1 minute speech for each poster)</b>					
15:45 - 16:15	<b>Break &amp; Poster Session I</b>					
16:15 - 17:35	<table border="1"><tr><td rowspan="4"><b>Scientific Talks I</b></td><td>A Journey towards a Deep-learning based Efficient No-Reference Image Quality Evaluation <i>Francesco Banterle</i> #Deep Learning #Image Processing #Image Quality Assessment</td></tr><tr><td>Gross polluters and vehicle emissions reduction <i>Matteo Bohm</i> #HumanMobility #UrbanAnalytics #ClimateChange</td></tr><tr><td>Injecting Transactions in RESTful Services <i>Luca Frosini</i> #ServiceOrientedComputing #RESTfulwebservices #RESTfultransactionmodel</td></tr><tr><td>Distilled Neural Networks for Efficient Learning to Rank <i>Cosimo Rulli</i> #learningtorank #efficiency #neuralnetworks</td></tr></table>	<b>Scientific Talks I</b>	A Journey towards a Deep-learning based Efficient No-Reference Image Quality Evaluation <i>Francesco Banterle</i> #Deep Learning #Image Processing #Image Quality Assessment	Gross polluters and vehicle emissions reduction <i>Matteo Bohm</i> #HumanMobility #UrbanAnalytics #ClimateChange	Injecting Transactions in RESTful Services <i>Luca Frosini</i> #ServiceOrientedComputing #RESTfulwebservices #RESTfultransactionmodel	Distilled Neural Networks for Efficient Learning to Rank <i>Cosimo Rulli</i> #learningtorank #efficiency #neuralnetworks
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	Distilled Neural Networks for Efficient Learning to Rank <i>Cosimo Rulli</i> #learningtorank #efficiency #neuralnetworks					
17:35 - 17:40	<b>Closing</b>					



## Poster Session I, November 8<sup>th</sup>, 15:45-16:15

Indoor Proximity Analysis through Indoor Localization Techniques

**Paolo Barontini**

#bluetooth, #indoor\_localization, #proximity

MINTIME-DF: Video Deepfake Detection in the wild

**Davide Cocomini**

#Deepfake Detection #Vision Transformers

A Conversational Agent for Creating Flexible Daily Automation

**Simone Gallo**

#Chatbot #Trigger-Action Rules #End-User Development

Neural Network Optimization via Simulated Annealing

**Ercan Kuruoglu**

#neural network structure #non-convex optimization #MCMC

Generating Synthetic Mobility Networks with Generative Adversarial Networks

**Giovanni Mauro**

#ApplicationsOfAI #GenerativeAdversarialNetworks #HumanMobility #UrbanAnalytics

Joint Functional Safety and Cybersecurity validation for highly connected and autonomous vehicles

**Francesco Merola**

#FunctionalSafetyAssurance #Automotive #Cybersecurity

Explainable Deep Image Classifiers for Skin Lesion Diagnosis

**Carlo Metta**

#Explainable AI #Skin Lesion #Adversarial Autoencoder

Automatic Prune Binarization

**Cosimo Rulli**

#pruning #quantization #neuralnetworks

## Day 2: November 15<sup>th</sup>, 2022

Schedule	
14:00 - 14:10	<b>Opening</b> <i>Coordinatori ISTI-Day</i>
14:10 - 14:20	<b>ISTI Awards Ceremony</b> <i>Franco Maria Nardini</i>
14:20 - 15:40	<p><b>Scientific Talks II</b></p> <p>Transparency of Automatic Web Accessibility Evaluation Tools <i>Marco Manca</i> #Accessibility - Automatic Validation #Tools - Transparency</p> <p>Quadmixer and SkinMixer: Composing Professional 3D Assets <i>Stefano Nuvoli</i> #Geometry Processing #Computer Graphics #Computer Animation</p> <p>Topological Data Analysis &amp; Machine Learning <i>Maria Antonietta Pascali</i> #topological machine learning #persistent homology #classification</p> <p>Ensemble Model Compression for Fast and Energy-Efficient Ranking on FPGAs <i>Salvatore Trani</i> #LearningToRank #FPGA #EfficientInference</p>
15:40 - 15:50	<b>Poster Fast Forward (1 minute speech for each poster)</b>
15:50 - 16:20	<b>Break &amp; Poster Session II</b>
16:20 - 17:40	<p><b>Scientific Talks III</b></p> <p>Understanding the impact of explanations on advice-taking: a user study for AI-based clinical Decision Support Systems <i>Andrea Beretta</i> #ExplainableAI #Advice-taking #ClinicalDecisionSupportSystem</p> <p>Unobtrusive Machine Learning for Text Classification <i>Andrea Esuli</i> #MachineLearning #TextLearning</p> <p>How do requirements evolve during elicitation? An empirical study combining interviews and app store analysis <i>Alessio Ferrari</i> #requirementsEngineering #interviews #appStore</p> <p>Open Science and open scientometrics. A transition in the making. <i>Andrea Mannocci</i> #scientometrics #openscience #datascience</p>
17:40 - 17:50	<b>Closing</b>

## Poster Session II, November 15<sup>th</sup>, 15:50-16:20

On the Applicability of Prototypical Part Learning in Medical Images: Breast Masses Classification Using ProtoPNet

**Andrea Berti**

#ExplainableAI #ProtoPNet #BreastMassesClassification

Who would help me? Measuring social effects on the evolution of psychological distress

**Salvatore Citraro**

#Complex Networks #Supportive online discourse #Online mental health communities

Deep Learning x Architecture: designing buildable shapes

**Andrea Favilli**

#Geometry Processing #Deep Learning #Computational Architecture

A Mobile Augmented Reality App for Creating, Controlling, Recommending Automations in Smart Homes

**Andrea Mattioli**

#Augmented Reality #Internet of Things #End-user Development

IMAGO: linking different KBs in Digital Humanities

**Nicolò Pratelli**

#Semantic Web #Ontologies #Digital Humanities

Mat-builder: a System to Build Semantically Enriched Trajectories

**Chiara Pugliese**

#mobility data #semantic enrichment #multiple-aspect trajectories

ILMART: Interpretable Ranking with Constrained LambdaMART

**Alberto Veneri**

#Interpretable Ranking #Interpretable Boosting

Representing Personalities in Humanoid Robots for Older Adults

**Eleonora Zedda**

#robot personality #humanoid robot #socially assistive robot