



# ISTI Day(s)

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## Program at a glance

### Day 1, November 16<sup>th</sup>, 2021

<b>14:00 - 14:05</b>	Opening
<b>14:05 - 14:35</b>	Invited: Paola Inverardi (DISIM, UniAq)
<b>14:35 - 15:00</b>	Intervento Direttore Scopigno (ISTI)
<b>15:00 - 15:10</b>	ISTI Awards
<b>15:10 - 15:50</b>	Scientific Talks (part I)
<b>15:50 - 16:30</b>	Poster Session (part I)
<b>16:30 - 17:50</b>	Scientific Talks (part II)
<b>17:50 - 17:55</b>	Closing

### Day 2, November 23<sup>rd</sup>, 2021

<b>14:00 - 14:05</b>	Opening
<b>14:05 - 14:20</b>	Intervento Direttore Campana (DIITET)
<b>14:20 - 15:40</b>	Scientific Talks (part III)
<b>15:40 - 16:20</b>	Poster Session (part II)
<b>16:20 - 17:40</b>	Scientific Talks (part IV)
<b>17:40 - 17:50</b>	Closing

### Access via Zoom

<https://us02web.zoom.us/j/89349297245>

## Day 1: November 16<sup>th</sup>, 2021

Schedule	
14:00 - 14:05	<b>Opening</b> <i>Coordinatori ISTI-Day</i>
14:05 - 14:35	<b>Invited speaker: Digitale ed impatto sociale come cambia la ricerca in Informatica</b> <i>Prof.ssa Paola Inverardi (DISIM, UniAquila)</i>
14:35 - 15:00	<b>Intervento del Direttore: Status after a transition year</b> <i>Roberto Scopigno</i>
15:00 - 15:10	<b>ISTI Awards Ceremony</b> <i>Franco Maria Nardini</i>
15:10 - 15:50	<b>Scientific Talks I</b>
	<p>Predicting Seasonal Influenza using Supermarket Retail Records <i>Salvatore Rinzivillo</i> #Nowcasting, #MarketRetail, #DataAnalysis</p> <p>Fine-grained Visual Textual Alignment for Cross-Modal Retrieval using Transformers <i>Nicola Messina</i> #InformationRetrieval #CrossModal #DeepLearning</p>
15:50 - 16:00	<b>Poster Fast Forward (1 minute speech for each poster)</b>
16:00 - 16:30	<b>Break &amp; Poster Session I</b>
16:30 - 17:50	<b>Scientific Talks II</b>
	<p>PTHash: Revisiting FCH Minimal Perfect Hashing <i>Giulio Ermanno Pibiri</i> #Hashing, #Compression, #DataStructures</p>
	<p>How Mobility and Sociality Reshape the Context of the Mobile CrowdSensing paradigm <i>Michele Girolami</i> #CrowdSensing, #SocialSensing, #DistributedComputing</p>
	<p>Feasibility of Spatial Model Checking for Nevus Segmentation <i>Giovanna Broccia</i> #SpatialLogics, #ModeChecking, #MedicalImaging</p>
	<p>Adaptive Utterance Rewriting for Conversational Search <i>Cristina Muntean</i> #ConversationalIR, #NeuralReRanking, #QueryRewriting</p>
17:50 - 17:55	<b>Closing</b>



## Poster Session I, November 16<sup>th</sup>, 16:00-16:30

Hebbian Semi-supervised Learning in a Sample Efficiency Setting

**Gabriele Lagani**

#HebbianLearning, #BioInspired, #MachineLearning

Collaborative Visual Environments for Evidence Taking in Digital Justice: a Design Concept

**Patrizio Dazzi**

#EdgeComputing, #DigitalJustice, #CollaborativeEnvironment

Targeting Gross Polluters and Grossly Polluted Roads to Improve Vehicles' Emissions Reduction Policies

**Matteo Bohm**

#VehicleEmissions, #SustainableCities

Deep Learning in Medical Imaging against Prostate Cancer

**Eva Pachetti**

#DeepLearning, #MedicalImaging, #ProstateCancer

Neural Network Compression for Efficient Learning to Rank

**Cosimo Rulli**

#LearningToRank, #NeuralNetworks, #Efficiency

Robot personalities for Cognitive Training of Older Adults with a Serious Game

**Eleonora Zedda**

#HumanoidRobot, #CognitiveTraining, #Personality

Garbled-Word Embeddings for Jumbled Text

**Gianluca Sperduti**

#GarbledWordEmbeddings, #GarbledWords, #Misspellings

Evaluating Deep Learning Methods for Low-Resolution Point Cloud

**Arslan Siddique**

#PointCloudRegistration, #PointCloudAlignment, #3DReconstruction

## Day 2: November 23<sup>rd</sup>, 2021

Schedule	
14:00 - 14:05	<b>Opening</b> <i>Coordinatori ISTI-Day</i>
14:05 - 14:20	<b>Intervento del Direttore DIITET</b> <i>Emilio F. Campana</i>
14:20 - 15:40	<p><b>Scientific Talks III</b></p> <p>Spatial Model Checking on GPU: A Declarative Approach to Accelerated Image Analysis, with Applications to Medical Imaging <i>Laura Bussi</i> #SpatialLogics, #ModelChecking, #GPUComputation</p> <p>Approaches to Static Prediction of Software Test Flakiness <i>Antonia Bertolino</i> #SoftwareTesting, #NonDeterministicTest, #Facebook2019_TAV_Award</p> <p>Situated Conditional Reasoning <i>Giovanni Casini</i> #KnowledgeRepresentationAndReasoning, #Logic-basedAI, #ConditionalReasoning</p> <p>From Text to Formal Narratives <i>Daniele Metilli</i> #SemanticWeb, #Ontology, #DigitalHumanities</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 IV</b></p> <p>Recommendations for Creating Trigger-Action Rules in a Block-Based Environment <i>Andrea Mattioli</i> #End-userDevelopment, #RecommendationSystems, #InternetOfThings</p> <p>Entity Deduplication in Big Data Graphs for Scholarly Communication <i>Michele De Bonis</i> #Deduplication #BigData #Graph</p> <p>CHARITY - Cloud for Holography and Augmented Reality <i>Massimiliano Corsini</i> #EdgeComputing, #3DStreaming, #AdaptiveRendering, #MediaDataCompression</p> <p>Complexity features of a neural mass model <i>Paolo Paradisi</i> #BrainModels, #ElectroEncelegraphy, #BiomedicalSignalProcessing</p>
17:40 - 17:50	<b>Closing</b>



## Poster Session II, November 23<sup>th</sup>, 15:50-16:20

Toward a Standard Approach for Echo Chamber Detection: Reddit Case Study

**Virginia Morini**

#EchoChambers, #Polarization, #ComplexNetworkAnalysis

Image Processing Applied to Temperature Pattern Identification

**Oscar Papini**

#ImageProcessing, #SeaSurfaceTemperature, #PatternAnalysis

Artificial Intelligence in Medical Imaging Against Lung Diseases and COVID-19

**Rossana Buongiorno**

#DeepLearning, #MedicalImaging, #Covid19

Pervasive Computer Vision for Intelligent Transport Systems

**Riccardo Leone**

#PervasiveVision, #IntelligentTransportSystems, #EdgeComputing, #SmartSurveillance

Automated generation of flexible metamaterial patterns and simulation via a reduced mechanical model

**Iason Manolas**

#ComputationalFabrication, #Metamaterials, #ReducedOrderSimulation

Learning to count biological structures with raters' uncertainty

**Luca Ciampi**

#AutomaticCellCounting, #CountingWithUncertainty, #BiomedicalImageAnalysis

Bridging Formal Methods and Artificial Intelligence in Medical Imaging via Spatial Model Checking: a Call for Collaboration and an Experimental Set-Up

**Vincenzo Ciancia**

#FormalMethods, #ArtificialIntelligence, #MedicalImaging

Combining CNNs and Vision Transformers for Video Deepfake Detection

**Nicola Messina**

#DeepLearning, #DeepFake, #Transformers

A conversational agent for creating automations in IoT environments

**Simone Gallo**

#ConversationalInterfaces, #InternetOfThings, #TriggerActionProgramming

Deep Learning for Precision Agriculture and Sustainability

**Antonio Bruno**

#Sustainability, #DeepLearning, #PrecisionAgriculture