ICT-DM 2023 - Paper Presentation Sessions
@UniversityClub + CLA Laboratory

Wednesday, September 13 University Club - CLA Laboratory	
16:15	**Session 1 –** Chair: Carlos Calafate **5G/6G, LORA and UAV Technologies for DM** Room: University Club

O-RAN Neutral Hosting as a Viable Solution for First Responders Seamless Connectivity
Andrea Marotta (University of L'Aquila, Italy); *Claudia Rinaldi* (CNIT National Inter-university Consortium for Telecommunications, Italy); *Carlo Centofanti* (University of L'Aquila, Italy); *Koteswararao Kondepu* (Indian Institute of Technology Dharwad, India); *Dajana Cassioli* (University of L'Aquila, Italy); *Fabio Graziosi* (University of l'Aquila, Italy)

Surviving Disaster Events Via Dynamic In-Network Processing Assisted by Network Digital Twins
Federica de Trizio (Politecnico di Bari, Italy); *Giancarlo Sciddurlo* (Politecnico di Bari & CNIT, Italy); *Giuseppe Piro*, *Domenico Striccoli*, *Ilaria Cianci* and *Gennaro Boggi*a (Politecnico di Bari, Italy)

A Service Migration Strategy for Resilient Multi-Domain Networks in Outage Scenarios
Federico Giarré (University of Rennes 1, France); *Yassine Hadjadj-Aoul* (University of Rennes, France); *Soraya Ait Chellouche* (University of Rennes 1, France)

Drone Network Design for Environmental Emergency Response in the Brazilian Amazon
Janiele Custodio (Morgan Stanley, USA); *Hernan Abeledo* (George Washington University, USA)

17:30	**Session 2 –** Chair: Yassine Hadjadj-Aoul **Mobile and wireless communications for DM** Room: University Club

Optimized Scheduling of Packets with Deep Sensing Irregular Slotted Aloha Influenced by Channel Knowledge for Wireless-Powered IoT Networks
Muhammad Tauseef Mushtaq (Politecnico di Bari, Italy); *Nicola Cordeschi* (University of Surrey, United Kingdom (Great Britain)); *Gennaro Boggia* and *Luigi Alfredo Grieco* (Politecnico di Bari, Italy)

Guaranteeing critical communications by using fuzzy logic based intelligent control systems in Wi-Fi Networks
Xhulio Limani (University of Antwerp, Belgium & Imec, Belgium); *Gilson Miranda, Jr* (University of Antwerp & Imec-IDLab, Belgium); *Carlos Filipe Moreira e Silva* (Federal University of Ceará, Brazil); *Xiaoman Shen, Chun Pan* and *Xingfeng Jiang* (Huawei Technologies Co. Ltd, China); *Chi Zhang* (Huawei Technologies Co. Ltd, Belgium); *Johann M. Marquez-Barja* (University of Antwerpen & imec, Belgium)

Semi-Narrow Band Ad-Hoc Wireless Communication System (SNB-AWCS) using VHF for Disaster Response
Cheikh Saliou Mbacke Babou (National Institute of Information and Communications Technology (NICT), Japan); Yasunori Owada (National Institute of Information and Communications Technology, Japan); Goshi Sato (NICT, Japan)

Use of QUIC Protocol for Efficient Data Transmission over Satellite in Emergency Scenario
Armir Bujari (University of Bologna, Italy); Mirko Franco and Claudio E. Palazzi (University of Padua, Italy); Mattia Quadrini (RomARS, Italy); Cesare Roseti and Francesco Zampognaro (University of Rome Tor Vergata, Italy)

	Thursday, September 14 University Club - CLA Laboratory
10:30	**Session 3 –** Chair: Constantinos Heracleous **Crowdsourcing and Social Media for DM** Room: CLA Laboratory

Study of the influence factors of social network crwodsourcing between a food delivery platform and delivers
Chung-Hua Chu and Kuei-Yi Chen (National Taichung University of Science and Technology, Taiwan); Min-Chi Chiu (National Taiwan University of Science and Technology, Taiwan)

Leveraging Supplementary Information for Multi-Modal Fake News Detection
Chia-Chun Ho and Bi-Ru Dai (National Taiwan University of Science and Technology, Taiwan)

Evolution of the Social Debate on Climate Crisis: Insights from Twitter during the Conferences of the Parties
Liliana Martirano and Lucio La Cava (Università Della Calabria, Italy); Andrea Tagarelli (University of Calabria, Italy)

Handcrafted Features Based Analysis of Social Media Images for Disaster Response
Tanu Gupta (Indian Institute of Technology Roorkee, India); Sudip Roy (IIT Roorkee, India)

	Session 4 – Chair: Giovanni Giambene **Prediction and Early Warning Systems in DM** Room: University Club
10:30	

Hydrological and structural monitoring for flood risk mitigation in Cosenza urban area (southern Italy)
Antonio Bilotta, Daniela Biondi, Giovanna Capparelli, Antonio Madeo and Francesco S. Liguori (University of Calabria, Italy)

Determining the Accuracy of Reinforced Model via Sentiment and Technical Analysis as a Stock Market Prediction Technique
Shubham Agrawal and Nitin Kumar (Netaji Subhas University of Technology, India); Geetanjali Rathee (Netaji Subhas University of Technology & Dwarka, Sector-3, New Delhi, India); Carlos T. Calafate (Universidad Politécnica de Valencia, Spain); Chaker Abdelaziz Kerrache (University of Laghouat, Algeria)

Enhancing health care infrastructure resiliency through an agent-based simulation methodology
David Carramiñana (Universidad Politécnica de Madrid & Information Processing and Telecommunications Center, Spain); Ana M. Bernardos, Juan Besada and Jose R Casar (Universidad Politecnica de Madrid, Spain)

Smart and Innovative Systems for Urban Flood Risk Management
Patrizia Piro, Mohammed Mudhafar Saleh Saleh, Behrouz Pirouz, Michele Turco and Stefania Anna Palermo (University of Calabria, Italy)

Ground-Based Interferometric Radar systems for natural hazard real-time emergency monitoring
Alessandro Pettinari (IDS GeoRadar srl, Italy); Matthias Twardzik (Hexagon AB, Italy); Giulio Telleschi (IDS GeoRadar srl, Italy)

11:50	**Session 5 –** Chair: Kurt Geihs **5G/6G, LORA and UAV Technologies for DM** Room: University Club

Implementing Mission-Critical UAV Swarm Coordination through the Integration of LoRa and ROS Frameworks
Panayiotis Kolios (University of Cyprus, Cyprus); Georgios Ellinas (University of Cyprus & KIOS Research and Innovation Center of Excellence, Cyprus); Maria Karatzia (KIOS Research and Innovation Center of Excellence, Cyprus)

Role of UAVs and HAPS for IoT-based Monitoring in Emergency Scenarios
Alessandro Andreadis, Giovanni Giambene and Riccardo Zambon (University of Siena, Italy)

SDN-driven Dynamic Deployment of IDS with Load Balancing for Drones in Emergency Scenarios
Mauro Tropea (Università della Calabria, Italy); Mattia Giovanni Spina and Floriano De Rango (University of Calabria, Italy)

Multi-UAV Wildfire Perimeter Monitoring System
Constantinos Heracleous, Panayiotis Kolios and Christos Panayiotou (University of Cyprus, Cyprus)

16:15	**Session 6 –** Chair: Annalisa Socievole **AI, Big data, and analytics for DM** Room: University Club

User Intervention in Disaster Management Systems for Resilient Smart Cities
Kurt Geihs (University of Kassel, Germany)

Forecasting Tsunami Waves using Regression Trees
Eugenio Cesario (University of Calabria, Italy); Salvatore Giampà (Dtok Lab, Italy); Enrico Baglione (University of Bologna, Italy); Louise Cordrie (INGV, Italy); Jacopo Selva (University of Naples Federico II, Italy); Domenico Talia (University of Calabria, Italy)

Exploring the Impact of Disrupted Peer-to-Peer Communications on Fully Decentralized Learning in Disaster Scenarios
Luigi Palmieri, Chiara Boldrini, Lorenzo Valerio, Andrea Passarella and Marco Conti (IIT-CNR, Italy)

Research on Mobile Network User Complaint Warning Method Based on Multimodal Data
Zixiang Di (Research Institute of China United Network Communications Corporation, China); Tian Xiao (China Unicom Research Institute, China); Bei Li (China Unicom, China); Yunfeng Peng (University of Science and Technology Beijing, China); Jianfei Li (ChinaUnicom, China); Xinzhou Cheng (China Unicom Network Technology Research Institute, China); Lexi Xu (China Unicom Research Institute & Queen Mary University of London, China); XiaoMeng Zhu (China Unicom Research Institute, China); HangBo Zheng (Zhejiang Airport Digital Technology Co., Ltd, China)

| Friday, September 15 |
| University Club - CLA Laboratory |

	Session 7 – Chair: Andrea Pugliese
10:45	**Distributed Systems and Applications for DM**
	Room: University Club

A Study on Energy Efficiency in Edge-assisted VR Applications with Meta Quest 2 for Disaster Management
Lorenzo Romagnoli and Gabriele Proietti Mattia (Sapienza University of Rome, Italy); Roberto Beraldi (Sapienza Università di Roma, Italy)

Privacy-Aware Crowd Monitoring and WiFi Traffic Emulation for Effective Crisis Management
Riccardo Rusca, Alex Carluccio, Diego Gasco and Paolo Giaccone (Politecnico di Torino, Italy)

A Stubborn based Strategy for Vehicles Recovery during Dangerous Events
L Luigi D'Alfonso (University of Calabria, UNICAL, Italy); Giuseppe Fedele and Francisco Ramiro Ulloa Herrera (University of Calabria, Italy)

Keyword-based multimedia data lookup in decentralized systems
Emanuele Fazzini (University of Bologna, Italy); Mirko Zichichi (Universidad Politécnica de Madrid, Spain); Stefano Ferretti (University of Urbino, Italy); Gabriele D'Angelo (University of Bologna, Italy)

	Session 8 – Chair: Luigi D'Alfonso
12:15	**Distributed Systems and Applications, Activity Modeling and Simulation Tools, 5G/6G LORA and UAV Technologies for DM**
	Room: University Club

Multi-Hop LoRa Communication for Natural Disaster Management: A Field Test
Giuseppe Marrara, Chiara Suraci, Angelo Tropeano, Giuseppe Bombino and Giuseppe Araniti (University Mediterranea of Reggio Calabria, Italy)

Emergency management in a Smart Campus: Case Studies and Future Directions
Giovanni Delnevo, Silvia Mirri and Paola Salomoni (University of Bologna, Italy); Vittorio Ghini (Università di Bologna, Italy)

	Activity Modeling and Detection for Emergency Response Andrea Pugliese (University of Calabria, Italy) *Assessing Time Behaviour in Disaster Management by Using Petri Nets and Model Checking* Franco Cicirelli (CNR - National Research Council, Italy); Libero Nigro (University of Calabria, DIMES, Italy) *Infrastructure-less Long-Range Text-Messaging System* Batyrkhan Baimukhanov and Dimitrios Zorbas (Nazarbayev University, Kazakhstan)
12:15	**Session 9 –** Chair: Roberto Beraldi **AI, Big data, and analytics for DM** Room: CLA Laboratory
	Privacy-oriented architecture for building automatic voice interaction systems in Smart Environments in disaster recovery scenario Antonio Gentile (ICAR-CNR, Italy); Davide Macrì (ICAR CNR, Italy); Emilio Greco (ICAR-CNR, Italy); Agostino Forestiero (CNR-ICAR, Italy) *The Role of Artificial Intelligence in Managing Emergencies and Crises within Smart Cities* Sami Shaffiee Haghshenas, Giuseppe Guido, Sina Shaffiee Haghshenas and Vittorio Astarita (University of Calabria, Italy) *Community Detection in Dense Networks using effective resistance and link pruning* Annalisa Socievole and Clara Pizzuti (National Research Council of Italy, Italy) *A Hybrid Deep Learning Model-Based Intrusion Detection System for Emergency Planning Using IoT-Network* Inam Ullah Khan (Isra University, Pakistan); Muhammad Yaseen Ayub (COMSATS University Islamabad, Attock Campus, Pakistan); Asrin Abdollahi (University of Kurdistan, Iran); Arijit Dutta (University of Calabria, Italy) *A simulation tool for crisis management and pre-disaster planning* Federico Eugeni (Università Degli Studi dell'Aquila, Italy); Sara Sacco and Donato Di Ludovico (Università Degli Studi Dell Aquila, Italy); Antinisca Di Marco (University of L'Aquila, Italy)