



**IEEE CyberSciTech / PICom / DASC / CBDCom 2022**

**Calabria, Italy**

# **Program Agenda**

# **The 7th IEEE Cyber Science and Technology Congress (CyberSciTech 2022)**

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- 26 Cheng Miao, Pan Wang, Zixuan Wang and Zeyi Li. A Trusted Classification Method of Encrypted Traffic Based on Attention Mechanism
- 29 Yueyu Dong, Fei Dai and Mingming Qin. A Privacy-Preserving Deep Learning Scheme for Edge-enhanced Smart Homes
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- 114 Youzhi Zhang, Sayak Chakrabarty, Rui Liu, Andrea Pugliese and V.S. Subrahmanian. A New Dynamically Changing Attack on Review Fraud Systems and a Dynamically Changing Ensemble Defense

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- 221 Yongxin Liu, Zheng Liu, Sihong Wu and Taile Chen. Active acoustic self guided torpedo parallel heading firing based on favorable advance angle

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- 17 Wenbo Huang, Feng Guo and Yang Yan. Retinal Vessel Segmentation Algorithm Based  
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- 98 Riheng Zhang, Min Tan, Xiaoyang Mao, Zhigang Gao and Xiaoling Gu. Adaptive Destruction Learning for Fine-grained Visual Classification
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- 210 Dingjie Wu, Xuanzhang He, Yao Zhang, Junjie Zhu, Xinyuan Zhang, Minchao Ye and Zhigang Gao. Binary Function Similarity Detection Based On Graph Neural Network With Self-Attention Mechanism

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# **The 20th IEEE International Conference on Pervasive Intelligence and Computing (PICom 2022)**

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# **The 20th IEEE International Conference on Dependable, Autonomic & Secure Computing (DASC 2022)**

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- 192 Lelio Campanile, Mauro Iacono and Michele Mastroianni. Towards privacy-aware software design in small and medium enterprises
- 6 Haotian Yang, Enliang Wang, Cai Yue and Zhixin Sun. Research on fire rescue path optimization of unmanned equipment based on improved slime mold algorithm

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- 203 Zuhail Ozturk, Haluk Topcuoglu and Mahmut Kandemir. Parallelism-Based Techniques for Slowing Down Soft Error Propagation
- Kumar Priyansh, Ritu Dimri, Fahim Islam Anik, Mst Shapna Akter, Hossain Shahriar,
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- 9 Alexander Dörflinger, Benedikt Kleinbeck, Mark Albers, Harald Michalik and Martin Moya. A Framework for Fault Tolerance in RISC-V
- 14 Trupil Limbasiya, Arijit Karati and Debasis Das. SELECT: Secure and Lightweight Context-Aware Mechanism for Smart Vehicular Networks
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### **D4S1T3 - DASC 7**

#### **20th International Workshop on Assurance in Distributed Systems and Networks (ADSN 2022) - Part 1**

*Chair: Massimiliano Rak*

- 55 Naoki Hirakura and Masaki Aida. Impact of Dimensionality of User Interaction Subspace on Multi-dimensional Opinion Formation  
 110 Roberto Natella, Andrea Ceccarelli and Massimo Ficco. Federated and Generative Data Sharing for Data-Driven Security: Challenges and Approach  
 Keitaro Watanabe, Hideharu Kojima, Yuichi Sudo, Naoto Yanai and Tatsuhiro  
 142 Tsuchiya. Implementation and Evaluation of Leader Election in the Population Protocol Model Using an Emulation Environment  
 188 Marco Barletta, Marcello Cinque, Luigi De Simone and Raffaele Della Corte. Introducing k4.0s: a Model for Mixed-Criticality Container Orchestration in Industry 4.0  
 193 Massimo Ficco, Raffaele Palmiero, Massimiliano Rak and Daniele Granata. MAVLink Protocol for Unmanned Aerial Vehicle: Vulnerabilities Analysis

### **D4S2T3 - DASC 8**

#### **20th International Workshop on Assurance in Distributed Systems and Networks (ADSN 2022) / 6th International Workshop on Emerging Dependable Computing System Technologies and Applications (EDCSTA 2022) / BigCyberSecurity 2022 - Part 2**

*Chair: Domenico Cotroneo*

- 212 Domenico Cotroneo, Luigi De Simone and Roberto Natella. On Temporal Isolation Assessment in Virtualized Railway Signaling as a Service Systems  
 215 Lujia Pan, Marcus Kalander, Yuchao Zhang and Pinghui Wang. Contrastive Representation based Active Learning for Time Series  
 216 Chengjin Yang, Dongdong Xie, Linxi Cai and Pinghui Wang. FBPB-SE: A Forward and Backward Private Blockchain-based Searchable Encryption with Fuzzy Multi-keyword  
 134 Kazuaki Tanaka and Hiroyuki Maeda. Robust Indoor Positioning Method using BLE and Wireless Mesh Network  
 222 Toshihiro Uchibayashi, Bernady Apduhan, Takuo Suganuma and Masahiro Hiji. Design and Implementation of a Data-Auditing Mechanism for Container Migration

## **D4S1T4 - DASC 9**

### **1st International Workshop on Hybrid Internet of Everything Models for Industry 5.0 (HIEMI)**

*Chair: Francesco Cauteruccio*

- 54 Paola Pierleoni, Lorenzo Palma, Alberto Belli, Sara Raggiunto and Luisiana Sabbatini. Supervised Regression Learning for Maintenance-related Data
- 120 Claudia Diamantini, Alex Mircoli, Ornella Pisacane and Domenico Potena. Comparing data-driven meta-heuristics for the bi-objective Component Repairing Problem
- 125 Paola Pierleoni, Alberto Belli, Lorenzo Palma, Luisiana Sabbatini and Sara Raggiunto. An IoT-based Wireless Sensor Network for Lighting Control Systems
- 180 Tullio Facchinetti, Marco Arazzi and Antonino Nocera. Time series forecasting for predictive maintenance of refrigeration systems

# **The 8th IEEE International Conference on Cloud and Big Data Computing (CBDCom 2022)**

## **D1S3T2 - CBDCom 1**

### **Edge-Cloud Systems**

*Chair: Fabrizio Marozzo*

- Toyotaro Suzumura, Akiyoshi Sugiki, Hiroyuki Takizawa, Akira Imakura, Hiroshi Nakamura, Kenjiro Taura, Tomohiro Kudoh, Toshihiro Hanawa, Yuji Sekiya, Hiroki Kobayashi, Yohei Kuga, Ryo Nakamura, Renhe Jiang, Junya Kawase, Masatoshi Hanai, Hiroshi Miyazaki, Tsutomu Ishizaki, Daisuke Shimotoku, Daisuke Miyamoto, 132 Kento Aida, Atsuko Takefusa, Takashi Kurimoto, Koji Sasayama, Naoya Kitagawa, Ikki Fujiwara, Yusuke Tanimura, Takayuki Aoki, Toshio Endo, Satoshi Ohshima, Keiichiro Fukazawa, Susumu Date and Toshihiro Uchibayashi. *mdx: A Cloud Platform for Supporting Data Science and Cross-Disciplinary Research Collaborations*
- 157 Sumedha Arora, Brigu Garg and Abhishek Sharma. *Cloud-IoT Based 'Multi-Disease Health Care System' for Multiple-Users Using Prediction Approach on Edge Devices*
- 181 Fabrizio Marozzo, Alessio Orsino, Domenico Talia and Paolo Trunfio. *Edge Computing Solutions for Distributed Machine Learning*
- 207 Attiq Ur-Rehman, Joarder Kamruzzaman, Iqbal Gondal and Alireza Jolfaei. *Cyber Resilience Modelling for the Operations of Hybrid Network*

## **D1S4T2 - CBDCom 2**

### **Big data theory and applications I**

*Chair: Alfredo Cuzzocrea*

- 78 Alfredo Cuzzocrea, Carson Leung, Carmine Gallo, Selim Soufargi, Siyuan Shang and Yubo Chen. *OLAP over Big COVID-19 Data: A Real-Life Case Study*
- 79 Alfredo Cuzzocrea, Carson Leung, Mojtaba Hajian and Marshall Jackson. *Effectively and Efficiently Supporting Predictive Big Data Analytics over Open Big Data in the Transportation Sector: A Bayesian Network Framework*
- 92 Wajeeha Iqbal, Abdul Javed, Muhammad Rizwan, Gautam Srivastava and Thippa Reddy Gadekallu. *Blockchain Based Secure Communication for IoT Devices in Smart Cities*

## **D2S3T2 - CBDCom 3**

### **Applications**

*Chair: Sudip Chakraborty*

- 196 Maria Teresa Gaudio, Sudip Chakraborty and Stefano Curcio. *Agri-food supply-chain traceability: a multi-layered solution*
- 72 Muhammad Uzair, Stefania Tomasiello, Evelin Loit and Jerry Chun Wei-Lin. *Predicting the soil organic carbon by recent machine learning algorithms*
- 85 Bailey Janeczko, Doug Pickering and Gautam Srivastava. *Western Hockey League (WHL) Regularized Adjusted Plus-Minus*



## **D2S4T2 - CBDCCom 4**

### **Big data theory and applications II**

*Chair: Valerio Bellandi*

- 57 Valerio Bellandi, Paolo Ceravolo, Samira Maghool, Margherita Pindaro and Stefano Siccardi. Pattern Matching Algorithm in Event Graphs
- 58 Yu Zhang, Min Wang, Michael Zipperle, Alireza Abbasi and Morteza Saberi. S-index: Significance of Academic Authors to Individual Publication Venues
- 74 Jimmy Ming-Tai Wu, Shuo Liu and Jerry Chun-Wei Lin. Mining of High-Utility Sequence Patterns in Large-Scale Uncertain Databases

## **Social Event (September 14, 2022)**

**Location: Hotel Eurolido, Falerna (CZ), Italy**

**16.00-19.30:** Sightseeing of Tropea town “the Pearl of the Tyrrhenian Sea”

**20.00-20.30:** Presentation of the Book “Io Amo” (“I love”) written by Maestro Gianfranco Fasano

**20.30-22.30:** Social Dinner

**22.30-23.00:** Musical Corner: Maestro Gianfranco Fasano & “guest star” Carlo Antonio Fortino (Winner of All Together Now Kids 2021)

**23.00-23.30:** Conference Awards

**23.30-00.00:** Conference Cake & Champaign Final Toast