## IMPORTANT: Follow Central European Time (CET) Zone

The 4th International Conference on Recent Trends in Image Processing & Pattern Recognition (RTIP2R) December 8-10, 2021, University of Malta, Msida, Malta

... in collaboration with PAMI Research Lab, Computer Science, USD (USA) & Central Univ. of Karnataka (India)

URL: <u>https://www.rtip2r-conference.org/2021/</u>

## Zoom links

Day I (link I): <a href="https://usd.zoom.us/meeting/register/tJYvcuiqrDMvGddCDaGn225t90WYCHI-kcU4">https://usd.zoom.us/meeting/register/tJYvcuiqrDMvGddCDaGn225t90WYCHI-kcU4</a>

Day 2 (link 2): https://usd.zoom.us/meeting/register/tJApdeqhqTovGteQvEgh\_CYMfLR5\_YoVKMq6

Day 3 (link 3): https://usd.zoom.us/meeting/register/tJcscOmrpjsvE9F1RNvHDZgXnGZHShXbp5iJ

Important: Registration is required. Make sure you enter 15 minutes before the session.

## Day I: December 8, 2021 (I:30 pm – 7 pm, CET)

#### Welcome

1:30 pm – 1:50 pm (CET) Zoom space: *link 1* 

## **Keynotes**

2:00 pm – 2:50 pm (CET): Ajith Abraham, PhD (MIR Labs, USA) Zoom space: *link I* Break (10 mins) 3:00 pm – 3:50 pm (CET): Girijesh Prasad, PhD (University of Ulster, UK) Zoom space: *link I* 

#### Break (10 mins)

#### Session I

4:00 pm – 7:00 pm (CET) Co-chairs: *11 papers – 3-4/chair* Satish Singh, PhD Robertas Damasevicius, PhD Vedika Gupta, PhD Zoom space: *Link1* (check webpage/email) Category: Computer Vision and Pattern Recognition

- 8 Skewness of Gabor features are used for Gender classification during COVID-19
- 14 Complex object detection using light-field plenoptic camera
- 24 Real-Time Face Recognition for Organizational Attendance Systems
- 49 Harnessing Sustainable Development in Image Recognition through No-Code AI applications: A Comparative Analysis
- 53 Evaluating Performance of Adam Optimization by Proposing Energy Index Break (15 mins)
- 61 An alignment-free fingerprint template protection technique based on minutiae triplets
- 64 Early prediction of complex business processes using association rule-based mining
- 66 A Framework for Masked-image Recognition System in COVID-19 Era
- 70 A Deep-Learning Based Automated Covid-19 Physical Distance Measurement System Using Surveillance Video
- 81 A Super Feature Transform for Small-size Image Forgery Detection
- 80 Face mask detection using Deep Hybrid Network Architectures

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## Day 2: December 9, 2021 (I:30 pm – 7 pm, CET)

### Welcome

1:30 pm – 1:50 pm (CET) Zoom space: *link 2* 

#### **Keynotes**

2:00 pm – 2:50 pm (CET): Sally McClean, PhD (University of Ulster, UK) Zoom space: *link 2* 

Break (10 mins)

#### Session I:

3:00 pm – 3:45 pm (CET) Chair: **Tanima Dutta, PhD Fernando Ortiz-Rodriguez, PhD** Zoom space: *Link 2* (check webpage/email) Category: Satellite imaging and remote sensing

- 7 Agricultural Field Analysis Using Satellite Hyperspectral Data and Autoencoder
- 62 Development of NDVI Prediction Model Using Artificial Neural Networks
- 77 Time Series Forecasting of Soil Moisture using Satellite Images

#### Break (15 mins)

## Session 2:

4:00 pm – 5:15 pm (CET) Chair: **Robert Splinter, PhD Manju Khari, PhD** Zoom space: *Link 2* (check webpage/email) Category: Signal processing and machine learning

- 13 Imagined object recognition using EEG-based neurological brain signals
- 15 A fast and efficient k-nearest neighbor classifier using a convex envelope
- 68 Single Channel Speech Enhancement using Masking based on Sinusoidal Modeling
- 69 Extraction of Temporal Features on Fibonacci Space for Audio based Vehicle Classification
- 78 An improved technique for preliminary diagnosis of Covid-19 via cough audio analysis

Break (15 mins)

#### Session 3:

5:30 pm – 6:30 pm (CET) Chairs: *4 papers* – *2/chair* **BV Dhandra, PhD and Ajit Danti, PhD** Zoom space: *Link 2* (check webpage/email) Category: Document analysis and recognition

- 1 UHTelHwCC: A Dataset for Telugu Off-line Handwritten Character Recognition
- 3 Inflectional and Derivational Hybrid Stemmer for Sentiment Analysis: a Case Study with Marathi Tweets
- 28 Adaptive threshold-based database preparation method for handwritten image classification
- 38 A Graph-based Holistic Recognition of Handwritten Devanagari Words: An approach based on spectral graph embedding

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## Day 3: December 10, 2021 (1:30 pm – 7 pm, CET)

## Welcome

1:30 pm – 1:50 pm (CET) Zoom space: *link 3* 

## **Keynotes**

2:00 pm – 2:50 pm (CET): Neeraj Kumar, PhD (Thapar Inst. of Eng. and Techno, India) Zoom space: *link 3* 

#### Break (10 mins)

## Session I:

3:00 pm – 7:00 pm (CET) Co-chairs: *13 papers – 4-5/chair* **PS Hiremath, PhD VS Malenath, PhD Aisha Makkar, PhD** Category: Healthcare: medical imaging and informatics Zoom space: *link* **3** (check webpage/email)

- 4 Designing the Convolutional Auto Encoder with Single Layered Long Short Term Memory Architecture for ECG Signal Compression
- 5 Cleaning Highly Unbalanced Multisource Image Dataset for Quality Control in Cervical Precancer Screening
- 18 Detection of Male Fertility Using AI Driven Tools
- 19 An empirical study of vision transformers for cervical precancer detection Break (15 mins)
- 21 CheXNet for Covid-19 Screening using 2.3K Positive Chest X-rays
- 22 An Enhanced Deep Convolution Neural Network model to diagnose Alzheimer's disease using brain Magnetic Resonance Imaging

26 Alzheimer's Disease Detection using Ensemble Learning and ANNs

- 35 Automatic DNN-based Knee Osteoarthritis Stages Identification Break (15 mins)
- 50 Stacked Dark COVID-Net: A Multi-class Multi-label classification approach for diagnosing COVID-19 using Chest X-Ray Images
- 52 Image Augmentation for Improving Automated Eligibility-Classification for Cervical Precancer Ablation Treatment
- 54 Osteoarthritis Detection Using Densely Connected Neural Network
- 63 YOLO for foreign object detection in chest x-rays
- 79 Mammogram Mass Classification: A CNN-based Techniques on Different Age Groups

Closing!

Closing remarks by Ravindra Hegadi, PhD and Lalit Garg, PhD

Update – upcoming event (rtip2r 2022): KC Santosh, PhD

Program designed by KC Santosh, PhD (santosh.kc@ieee.org)