HIS 2020 – NaBIC 2020

Technical Program Schedule (2.0)

ONLINE on CISCO Webex platform
December 12, 2020 - Saturday
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09:00 - 10:00 GMT:
Plenary 1: Prof. Dr. Sushmita Mitra, Indian Statistical Institute, Kolkata, India

10:00 - 11:00 GMT:
Plenary 2: Prof. Dr. Bassem Jarboui, Sfax University, Tunisia

December 13, 2020 - Sunday
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09:00 - 10:00 GMT:
Plenary 3: Prof. Dr. Tzung-Pei Hong, National University of Kaohsiung, Taiwan

December 14, 2020 - Monday
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09:00 - 10:00 GMT:
Plenary 4: Prof. Dr. André Rossi, Université Paris-Dauphine, France

10:00 - 11:00 GMT: HIS - 01
4 Auto-encoder based Wavelet and Extreme Learning Machine for face recognition
   Mariem Kadri, Salwa Said and Ridha Ejbali

5 Sparse Wavelet Auto-Encoder for Covid-19 Cases Identification
   Houda Lazrag, Ramzi Ben Ali and Ridha Ejbali

14 Text Classification Using Convolution Neural Networks with FastText Embedding
   Md. Rajib Hossain and Moshiul Hoque

16 Deep Convolutional Neural Network Based on Wavelet Transform for Super
   Image Resolution
   Nesrine Chaibi, Asma Eladel and Mourad Zaied

31 Inverse Neural Control of a Magnetic Levitation System: Experimental Results
   Bruno E. Silva and Ramiro S. Barbosa

11:00 - 12:00 GMT: HIS - 02
36 Optimal design of fuzzy controllers using the Multiverse optimizer
   Lucio Amezquita, Oscar Castillo, Jose Soria and Prometeo Cortes-Antonio

40 Optimal design of a fuzzy system with a real-coded genetic algorithm for
   Diabetes classification
Julio Cesar Monica, Patricia Melin and Daniela Sanchez

43 Stochastic Fractal Dynamic Search for the optimization of CEC’2017 benchmark functions
Marylu Lagunes, Oscar Castillo, Fevrier Valdez and Jose Soria

45 Face mask detection using Deep Learning
Rashmi Arora, Jayant Dhingra and Abhinav Sharma

46 Wavelet feature with CNN for identifying parasitic egg from a slender-billed’s nest
Nhidi Wiem, Chokri Mohamed Ali and Ejbali Ridha

12:00 - 13:00 GMT: HIS - 03

47 Evaluation of an Open Source Solver to Assist the Non-Urgent Patients Transport Problem
Emanuel Lopes and Eliana Costa E Silva

55 Predicting Individual Substance Abuse Vulnerability
Iqbal Sarker

59 The design requirements of a decision support system for waste control
Mahmoud Ershadi, Marcus Jefferies, Peter Davis and Mohammad Mojtahedi

66 Deep Human Action Recognition System for Assistance of Alzheimer's Patients
Rimeh Jarray, Ahmed Snoun, Tahani Bouchrika and Olfa Jemai

13:00 - 14:00 GMT: NaBIC - 01

1 Cost-Conscious Internal Information Maximization for Disentangling and Interpreting Multi-Layered Neural Networks
Ryotaro Kamimura

5 An Extensive Survey on Deep Learning Approach for Crop Diseases Management
Vaishali Nirgude and Sheetal Rathi

15 An Artificial Orca Algorithm for Continuous Optimization
Lydia Sonia Bendimerad and Habiba Drias

19 Particle swarm optimization for query items re-rating
Ilyes Khennak, Habiba Drias and Yassine Drias

14:00 - 15:00 GMT: NaBIC - 02

22 Pastoralist Optimization Algorithm (POA): A Culture-Inspired Metaheuristic For Uncapacitated Facility Location Problem (UFLP)
Ibrahim Mohammed Abdullahi, Muhammed Bashir Mu'Azu, Olayemi Mikail Olaniyi and James Agajo

23 Enhancing Assistive Technology with Biomimicry and Social Robots
Saurav Gandhi and Ayush Goyal

26 Incorporation of additional modules within Particle Swarm Optimization for feasibility conditions of multi-index Transportation Problem
Gunwinder Singh, Amarinder Singh and Bikramjit Singh

15:00 - 16:00 GMT:
Plenary 5: Prof. Dr. Amine Nait-Ali, University Paris-Est Créteil, France

December 15, 2020 - Tuesday
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13:00 - 14:00 GMT:
Plenary 6: Dr. Rudy A. Oude Vrielink, University of Twente & TwiQel, Netherlands

14:00 - 15:00 GMT:
Plenary 7: Prof. Dr. Frederico Gadelha Guimarães, Federal University of Minas Gerais, Brazil

15:00 - 16:00 GMT:
Plenary 8: Prof. Dr. Fakhri Karray, University of Waterloo, Canada

December 16, 2020 - Wednesday
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09:00 - 10:00 GMT:
Plenary 9: Prof. Dr. Saman K. Halgamuge, University of Melbourne, Australia

10:00 - 11:00 GMT:
Plenary 10: Prof. Dr. Salvador García, University of Granada, Granada, Spain

11:00 - 12:00 GMT:
Plenary 11: Prof. Dr. Vincenzo Piuri, Università degli Studi di Milano, Italy

12:00 - 13:00 GMT:
Plenary 12: Prof. Dr. Dries F. Benoit, Ghent University, Belgium

14:00 - 15:00 GMT:
Plenary 13: Prof. Dr. Dijiang Huang, Arizona State University, USA

December 17, 2020 - Thursday
09:00 - 10:00 GMT:
Plenary 14: Prof. Dr.Ketan Kotecha, Symbiosis Institute of Technology, India

December 18, 2020 - Friday
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09:00 - 12:00 GMT:
Tutorial 1: Prof. Anand J Kulkarni, Symbiosis Center for Research and Innovation, Symbiosis International, India

12:00 - 01:00 GMT: NaBIC - 03

14 Self-parameterized swarm intelligence algorithms for targets' detection in complex and unknown environments.
   Naila Aziza Houacine and Habiba Drias

15:00 - 16:00 GMT:
Plenary 15: Prof. Dr. Sheela Ramanna, University of Winnipeg, Canada

OFFLINE Presentations of HIS 2020

2 Vertical Interior Distance Ratio to Minimum Bounding Rectangle of A Shape
   Zekun Li, Baolong Guo, Xia Ren and Nannan Liao
   URL: https://youtu.be/LHnB17rh-SQ

6 Design Guide Prediction Model for the legal Interactions (GPM-LI)
   Samaher Al-Janabi and Gada K.
   URL:

7 Unsupervised image segmentation using THMRF model
   Mouna Zitouni, Mourad Zribi and Afif Masmoudi
   URL: https://youtu.be/-dHAvOuFOsY

8 Maximizing an organization’s operating enactment in the areas of planning and management
   Sajid Ahmed Mohamed Abdul Kader and Kinslin Devaraj
   URL: https://youtu.be/bOVdcT68s-s

10 Accent and Gender Recognition from English Language Speech and Audio Using Signal Processing and Deep Learning
   Jagjeevan Singh Shergill, Chandresh Pravin and Varun Ojha
   URL: https://www.youtube.com/watch?v=jcdnKjUH78M&feature=youtu.be
11 Improved Path Planning with Memory Efficient A* Algorithm and Optimization of Narrow Passages
Thomas Hanne, Rolf Dornberger and Lukas Weber
URL: https://tube.switch.ch/videos/19028761

12 Intelligent mobile application to determine the existence of medicines associated with COVID’19 in a social network of medical dispensaries in a Smart City.
Alberto Ochoa-Zezzatti and Marco Julio Del Moral
URL:

13 NoSQL Data Lake: A Big Data Source From Social Media
Hichem Dabbèchi, Nahla Zaaboub, Haytham Elghazel and Kais Haddar
URL:

17 Optimizing Instance Selection Strategies in Interactive Machine Learning: An Application to Fraud Detection
Davide Carneiro, Miguel Guimarães and Miguel Sousa
URL:

18 Building IoT Analytics and Machine Learning with Open Source Software for Prediction of Environmental Data
Ha Duyen Trung, Nguyen Xuan Dung and Nguyen Huu Trung
URL: https://youtu.be/8HonHFOr_iA

19 ANFIS-based Inverse Kinematics and Forward Dynamics of 3 DOF Serial Manipulator
Deepak Deshmukh, Dilip Kumar Pratihar, Alok Kanti Deb, Hena Ray and Alokesh Ghosh
URL: https://youtu.be/ZBS126UaQC0

20 Design and Development of Intelligent Pesticide Spraying System for Agricultural Robot
Deepak Deshmukh, Dilip Kumar Pratihar, Alok Kanti Deb, Hena Ray and Nabarun Bhattacharyya
URL: https://youtu.be/luvUs_qg93Q

21 Solving Dynamic Bag-of-Tasks Scheduling Problem in Heterogeneous Multi-cloud Environment Using Hybrid Bi-level Optimization Model
Mouna Karaja, Meriem Ennigrou and Lamjed Ben Said
URL: https://www.youtube.com/watch?v=4SEzEHxoKWI

22 Caching mechanisms evolution in CCN architectures
Amna Fekih, Sonia Gaied Fantar and Habib Youssef
URL: https://youtu.be/xEzboqGeb7M
23  SentiLSTM: A Deep Learning Approach for Sentiment Analysis of Restaurant Reviews
   Eftekhar Hossain, Omar Sharif and Mohammed Moshiul Hoque
   URL:

24  Characterizing Antennas' Radiation Pattern Using Bernoulli Lemniscates
   Wissal Attaoui, Essaid Sabir and Elmehdi Amhoud
   URL:  https://youtu.be/ouhw1z2CrJo

25  Analysis of Metaheuristics Feature Selection Algorithm for Classification
   Samuel-Soma Ajibade, Nor Bahia Ahmad and Zainal Anazida
   URL:  https://youtu.be/LAd4_xcQMhw

26  Comparison between a Genetic Algorithm and Hybrid Genetic Algorithms to Solve the TSP
   Thomas Hanne, Rolf Dornberger, Dejan Trifunovic and Janic Mathias Istanto
   URL:

27  Hybridization of adaboost with random forest for real-time prediction of online shoppers' purchasing intention
   Karim Baati
   URL:

29  Change Detection in Satellite Imagery: a multi-label approach using Convolutional Neural Network
   Anurag Priyadarshi and Pramod Kumar Singh
   URL:  https://youtu.be/gPxT0BacnNk

32  COVID-19 Detection using Deep Learning
   K Reddy Madhavi, P Anjaiah, T Venkata Ratnam and Padmavathi Kora
   URL:

34  An Isolation Forest Learning Based Outlier Detection Approach for Effectively Classifying Cyber Anomalies
   Iqbal Sarker
   URL:

35  An Effective Heart Disease Prediction Model based on Machine Learning Techniques
   Iqbal Sarker
   URL:

37  A New Bi-Objective Classic Transportation Model Considering Social Justice
   Sohaib Dastgoshade and Ajith Abraham
   URL:  https://youtu.be/ioYZEO7hGQg
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<td>An Enhanced Auto Adaptive Vector Evaluated-Based Metaheuristic for Solving the Environmental Economic Dispatch Problem</td>
<td>Leticia de Fátima Corrêa Costa, Omar Andres Carmona Cortes and João Pedro Augusto Costa</td>
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<td>Sentence Similarity Computation Based on Deep Learning</td>
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<td>Toworads a new approach for dealing with Uncertainty in Sleep Stages Classification Belief eXtended Classifier System</td>
<td>Rahma Ferjani, Lilia Rejeb and Lamjed Ben Said</td>
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<td>Evaluation of Data Augmentation for Detection Plant Disease</td>
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<td>Movie Recommendation System Addressing Changes in User Preferences with Time</td>
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Dhairya Parikh, Dilpreet Kaur, Kajal Parikh, Prakhar Yadav and Hemant Rathore
URL: https://www.youtube.com/watch?v=k_XOiXKxPxA&feature=youtu.be

69 Internet of Things: Applications, Adoptions and Components - A Conceptual Overview
Alfa Ayegba Abraham, Sanjay Misra, Oluranti Jonathan and Dr. Ravin Ahuja
URL: https://www.youtube.com/watch?v=0p6V_4Nh90I

70 ExplainEx: An Explainable Artificial Intelligence Framework for Interpreting Predictive Models
Nnaemeka E. Udenwagu, Ambrose Azeta, Sanjay Misra and Dr. Ravin Ahuja
URL: https://youtu.be/VjkmtHhOOcA

71 Enhancing the Low Adoption Rate of M-commerce in Nigeria through Yoruba Voice Technology
Kehinde Ajayi, Ambrose Azeta, Sanjay Misra and Dr. Ravin Ahuja
URL: https://youtu.be/Q6CeL14TW4M

72 Blockchain-Based Framework for Secure Transaction in Mobile Banking Platform
Awotunde Joseph Bamidele, Roseline Ogundokun, Sanjay Misra and Dr. Ravin Ahuja
URL: https://youtu.be/k9MPnKqJaNs

74 A Comprehensive Survey on TCP Congestion and incast Solutions in Data Center Networks
Houda Amari, Wassef Louati, Lyes Khoukhi and Lamia Hadrich Belguith
URL:

76 Analysis of Text Mining Tools in Disease Prediction
Shabnam K Tyagi, V Vani, Shaveta Malik, Amit Kumar Tyagi and Sravanti K Reddy
URL:

77 The Future With Advanced Analytics: A Sequential Analysis of the Disruptive Technology’s Scope
Varsha Ramesh, Siddharth Nair, Amit Kumar Tyagi, Dr. Aswathy S U and Radhakrishnan R
URL:

78 Modeling Topic Specific Credibility in Twitter based on Structural and Attribute Properties
Md. Habibur Rahman, Tabia Tanzin Prama and Md Musfique Anvar
URL: https://www.youtube.com/watch?v=3ndicVmqIvHQ&feature=youtu.be

OFFLINE Presentations of NaBIC 2020
2 An island model genetic algorithm approach to tuning AI Bots
Parimala Thulasiraman and Riley Wall
URL: https://youtu.be/rK2hTPZnZ-A

4 Parameter Selection for Ant Colony Optimization for Solving the Travelling Salesman Problem Based on the Problem Size
Thomas Hanne, Rolf Domberger, Philipp Kempter and Martin Peter Schmitz
URL: https://tube.switch.ch/videos/3468966a

8 Wind-power multi-step predictions in northeastern Brazilian regions using artificial neural networks
Yann Fabricio Cardoso de Figueiredo, Lidio Mauro Lima De Campos and Roberto Célio Limão de Oliveira
URL: https://www.youtube.com/watch?v=FEo2HsaIUXU&feature=youtu.be

9 Modelling IF Steels using Artificial Neural Networks and Automated Machine Learning
Douglas Macedo Sgrott, Fabricio Moreira Cerqueira, Fabiano J. F. Miranda, José F. S. Filho and Rafael Stubs Parpinelli
URL: https://www.youtube.com/watch?v=bYWKqK-jRqA&feature=youtu.be

11 Comparing Best and Quota Fragment Picker Protocols Applied to Protein Structure Prediction
Nilcimar Neitzel Will and Rafael Stubs Parpinelli
URL: https://youtu.be/4IjkFAeu3U

12 Portable olfactometric platform for scent tea classification
Jeniffer Molina, Luis Fernando Valdez and Juan Manuel Gutiérrez
URL: https://youtu.be/7Rf3YVjt3Q

16 Distance Minimization Problems for Multi-factorial Evolutionary Optimization Benchmarking
Shio Kawakami, Tomoaki Takagi, Keiki Takadama and Hiroyuki Sato
URL: https://youtu.be/GK-wSiNlzwl

18 Automatic white blood cell classification using Convolution Neural Network and Support Vector Machine
Kien Hoang Truong, Duc Nguyen Minh and Luong Duong Trong
URL: https://youtu.be/XhGMMKzjmYo

24 Shape From Shading: A Non-Iterative method using neural networks
Omar El Farouk Bourahla, Abderrahmane Mahdi Debbah, Lyes Abada and Saliha Aouat
URL: https://www.youtube.com/watch?v=Ob2l1NrvhGk
25 A Hierarchical Hidden Variable Model of Effective Housing Finance in Nigeria through SEM Smart-PLS
   Anthonia Adediran and Hishamuddin Mohd Ali
   URL: https://youtu.be/OW1jcRcZRkc

27 Breast cancer detection using texture features and KNN algorithm
   Durgadevi Murugan and Mahendra Kanojia
   URL: https://youtu.be/ADWdw-wwAwA

28 Assessing Impacts of Low Flow on Kainji Hydro-Power Generation
   Taiwo Oseni Amoo, Nekin Mnak Motebany, Abdultaofeek Abayomi, Uduak Umoh and Murimo Bethel Mutanga
   URL: