



AMITY SCHOOL OF ENGINEERING & TECHNOLOGY

PRESENTS

12TH INTERNATIONAL CONFERENCE
CONFLUENCE 2022

27th - 28th January, 2022 | Amity University, Noida (New Delhi NCR)

THEME:

CLOUD COMPUTING

**DATA SCIENCE
& ENGINEERING**

Delegate Registration Link: <https://virtualevents.amizone.net/>

PROGRAMME SCHEDULE

**Day 1: Thursday, January 27, 2022
(IST)**

09:15Hrs – 9:45 Hrs (Room 1)	Keynote address 1 by Prof. (Dr.) Virendra Bhavsar, University of New Brunswick, Canada on “Selected Frontiers in High Performance Computing and Artificial Intelligence”
09:15Hrs – 9:45 Hrs (Room 2)	Keynote address 2 by Prof. (Dr.) Ing. Mario Jose Divan, Director – Divsar & Professor-National University of La Plata, Argentina on “Towards Real-time Measurement-aware decision making”
09:15Hrs – 9:45 Hrs (Room 3)	Keynote address 3 by Prof. (Dr.) Lizy Kurian John, Professor, University of Texas at Austin, USA on “Predicting Performance of Data centers at Scale”
09:45Hrs – 10:15 Hrs (Room 1)	Keynote address 4 by Prof. (Dr.) Arif Sarwat, Director, Florida International University, Florida on “Infrastructure Development: Impact of AI and Data to build next generation of hybrid renewable power plant”
09:45Hrs – 10:15 Hrs (Room 2)	Keynote address 5 by Prof. (Dr.) Bernhard Pfahringer, Waikato University, New Zealand on “Simple self-training approaches for semi-supervised image classification”.
09:45Hrs – 10:15 Hrs (Room 3)	Keynote address 6 by Prof. (Dr.) Christopher Stewart, Professor, Ohio State University, USA on “Data-Driven Computational Systems”
10:15 Hrs–12:00Hrs (Room 1)	Inaugural Session
10:15 Hrs – 10:22 Hrs	Curtain Raiser: Introduction to Theme of Confluence-2022 by Prof. (Dr.) Abhay Bansal, Jt. Head, Amity School of Engineering & Technology, Director DICET & General Chair, Confluence 2022
10:22 Hrs – 10:27 Hrs	Welcome Address by Prof. (Dr.) Manoj Kumar Pandey, Jt. Head, ASET
10:27 Hrs – 10:30 Hrs	Welcome Address by Prof. (Dr.) K.M Soni, Deputy Dean, Engineering & Technology Domain
10:30 Hrs – 10:35 Hrs	Address by Prof. (Dr.) W. Selvamurthy, President, Amity Science, Technology & Innovation Foundation (ASTIF)
10:35 Hrs – 10:40 Hrs	Address by Prof. (Dr.) Balvinder Shukla, Vice Chancellor, AUUP & Co-Patron, Confluence 2022

10:40 Hrs- 10:47 Hrs	Address by Guest of Honor Mr. Manish Tiwari, CIO, Fractal
10:47 Hrs- 11:05 Hrs	Keynote Address by Prof. (Dr.) Anant Agarwal, Founder and CEO of edX, Professor MIT, USA
11:05 Hrs- 11:10 Hrs	Release of Confluence 2022 Proceedings
11:10Hrs- 11:20 Hrs	Address by Guest of Honor Prof. (Dr.) Jansuz A. Kozinski, Dean, Lakehead University, Canada
11:20 Hrs- 11:25 Hrs	Conferring Honorary Professorships
11:25 Hrs-11:30 Hrs	Address by Guest of Honor Prof. (Dr.) Asheesh Kumar, Professor, MNNIT Allahabad, Immediate Past Chairman, IEEE UP Section India
11:30 Hrs- 11:35 Hrs	Address by Guest of Honor Prof. (Dr.) J Ram Kumar, Professor, IIT Kanpur and Past Chairperson, IEEE UP Section, India
11:35 Hrs-11:40 Hrs	Address by Guest of Honor by Prof. (Dr.) Bebo White, Stanford University, USA
11:40 Hrs- 11:45 Hrs	Address by Guest of Honor by Mr. Deepak Talwar, National Security Officer, Microsoft
11:45 Hrs – 11:50 Hrs	Few Thoughts by Dr. Atul Chauhan, Chancellor, AUUP & President RBEF, Patron, Confluence 2022(To be Confirmed)
11:50 Hrs – 11:55 Hrs	Few Thoughts by Dr. Ashok Chauhan, Founder President, RBEF & Chairman AKC Group of Companies, Patron in Chief, Confluence 2022(To be Confirmed)
11:55 Hrs- 12:00 Hrs	Vote of thanks by Prof. (Dr.) Sanjeev Thakur, HOD CSE, ASET, Noida
12:30 Hrs– 14:00 Hrs (Room 1)	Industry Session I: Industry Session on Artificial Intelligence & Machine Learning Mr. Sunil Kumar Mishra, Head, Ecosystem Innovation Group, Infosys Finacle Mr. Anurag Saxena, Chief Operating Officer at EasyGov (Jio Platforms), Founder and Director at Digital Economy Foundation Mr. Ajay Singh, Associate Director and Head, HCL Technologies.
12:00 Hrs– 12:30Hrs (Room 2)	Keynote address 7 by Prof. (Dr.) Simeon Simoff, Western Sydney University, Australia on “Handling Causality and Interpretability Issues in Industrial Machine Learning Projects”
12:00 Hrs– 12:30Hrs (Room 3)	Keynote address 8 by Prof. (Dr.) Vijanth Sagayan Asirvadam, Professor, Universiti Teknologi PETRONAS, Malaysia on “Data Science Why the Race & Craze”
12:30 Hrs– 13:00Hrs (Room 2)	Keynote address 9 by Prof. (Dr.) Mohammad Rihan, Vice Chair, IEEE UP Section, Aligarh Muslim University on “ Role of Data in Green Energy Transition”
12:30 Hrs– 13:00Hrs (Room 3)	Keynote address 10 by Prof. (Dr.) Jean Paul, University of Cape Town, South Africa on “The Adoption of Cloud Computing in South Africa’s Oil and Gas Industry”

12:00 Hrs- 13:30 Hrs

Paper Presentation: Track 1A- AI & Soft Computing

Session Chair: Prof. (Dr.) Ranjeet Kumar Rout, NIT Srinagar, India

Session Co-Chair: Dr. Vasudha Vashisht, Amity University Uttar Pradesh, Noida, India

Paper ID 165: Mansi Bhatia, H D Arora, Anjali Naithani and Surbhi Gupta, "Distance measures of Pythagorean fuzzy sets based on sine function in property selection under TOPSIS approach"

Paper ID 155: Surbhi Gupta, Shefali Kanwar, H.D. Arora and Anjali Naithani, "Assessment of Reliability Factors in Glass Manufacturing plant Using Boolean Algebra and Neural network".

Paper ID 84: Anju Latha Nair S and Rajesh Kannan Me, "Fusion of Bag of Visual Words with Neural Network for Human Action Recognition"

Paper ID 482: Abishai Ebenezer, Adithya Oasis, Dhruv Sharma, Rithvik Sada and Arti Arya, "A Question-Centric Evaluation of Descriptive Answers using Attention-Based Architecture".

Paper ID 274: Vaibhav Ji Srivastav and Surbhi Vijh, "Face Mask Detection using Convolutional Neural Network".

Paper ID 439: Kumar Mallikarjuna, Sumanta Pasari and Kamlesh Tiwari, "Hierarchical Classification using Neighbourhood Exploration for Sparse Text Tweets"

12:00 Hrs- 13:30 Hrs

Paper Presentation: Track 2A- Algorithms and Software

Session Chair: Prof. (Dr.) Pradeep Tomar, Gautam Buddha University, India

Session Co-Chair: Mr. Anant Kumar Jaiswal, Amity University Uttar Pradesh, Noida, India

Ms. Sangeeta Rani, Amity University Uttar Pradesh, Noida, India

Paper ID 248: Carlos F. Cruzado, Liset S. Rodriguez-Baca, Lizeth G. Huanca-López and Erika I. Acuña-Salinas, "Reference framework "HOGO" for cybersecurity in SMEs based on ISO 27002 and 27032".

Paper ID 444: Mansi Agnihotri and Anuradha Chug, "Understanding Refactoring Tactics and Their Effect on Software Quality".

Paper ID 377: Ayush Bhardwaj, Sahil Jha, Kaushlendra Pratap and Gaurav Mishra, "Nirjas: An open-source framework for extracting metadata from the source code"

Paper ID 632: Nida Shakeel and Rajendra Kumar Dwivedi, "A Learning Based Influence Maximization across Multiple Social Networks".

Paper ID 86: Li Qin Hu, Asif Khan, Amit Yadav and Hong Liu, "Research on the Appraisal of the Attraction of Technological Talents: A Case Study for Shuangcheng Economic Circle of Chengdu-Chongqing region"

Paper ID 484: Rishabh Bhaskar and Ankita Bansal, "Implementing Prioritized-Breadth-First-Search for Instagram Hashtag Recommendation".

12:00 Hrs- 13:30 Hrs

Paper Presentation: Track 3A- Big Data and Data Mining

Session Chair: Prof. (Dr.) B.K. Sharma, NITRA, Govt. of India

Session Co-Chair: Dr. Misha Kakkar, Amity University Uttar Pradesh, Noida, India

Paper ID 382: Nitish S, R Darsini, Shashank G S, Tejas V and Arti Arya, "Bidirectional Encoder Representation from Transformers (BERT) Variants for Procedural Long-Form Answer Extraction".

Paper ID 196: Harshitha Batta, Anjana Murthy and Savitri S, "Predicting Popularity of YouTube videos using Viewer Engagement Features".

Paper ID 233: Vikas Suhag, Sanjay Dubey and Bhupendra Sharma, "Development of Software Defect Data Collection Framework for GitHub".

Paper ID 365: Xiaojun Wu, Jingjing Wei, Sheng Yuan, Zihong Chen and Xiaochun Wang, "Hierarchical Clustering Algorithm Based on Fast and Uniform Segmentation".

Paper ID 222: Ambu Karthik, Jyoti Shetty and Shobha G, "Performance Skew Prediction in HPC Systems".

Paper ID 326: Sitha Ram M, Suresh G V and Narasimha Swamy Biyappu, "Multiclass Classification for Large Medical Data using Adaptive Random Forest and Improved Feature Selection Methods"

12:00 Hrs- 13:30 Hrs

Paper Presentation: Track 4A- Cloud Computing & Virtualization

Session Chair: Prof. (Dr.) Vishal Bhatnagar, Ambedkar Institute of Technology, New Delhi, India

Session Co-Chair: Dr. Dolly Sharma, Amity University Uttar Pradesh, Noida, India

Paper ID 694: Goutham Swaminathan, Keshav Shivkumar, Teja Puvvadi, Arjun Shekar and Shilpa S, "Cloud-Based Method for Detecting Skin Cancer".

Paper ID 311: Mohammad Anas, Raza Imam and Faisal Anwer, "Elliptic Curve Cryptography in Cloud Security: A Survey".

Paper ID 257: Anant Jayswal and Daya Krishan Lobiyal, "A comparative study of task scheduling metaheuristic algorithms in cloud computing".

Paper ID 451: Sonali Sharma, Shilpi Sharma and Tanupriya Choudhury, "A Study and Analysis Of Decentralized Cloud Based Platform".

Paper ID 115: Madhulika Bhatia, Saru Dhir, Poonam Tanwar and Amit Khan, "Semantic Similarity based measurement for Lung infection imagery using Deep Learning".

Paper ID 406: Yves Attry Kalin, Yash Bhardwaj, Subhash Arun Dwivedi, Vivek Jha, Shrivyam Risariya and Arun Prakash Agrawal, "Analogizing the Potency of Deep Learning Models for Glaucoma Detection".

12:00 Hrs- 13:30 Hrs

Paper Presentation: Track 5A- Computer Network & Sensors

Session Chair: Prof. (Dr.) Anand Nayyar, Duy Tan University, Da Nang, Vietnam

Session Co-Chair: Dr. Achyut Shankar, Amity University Uttar Pradesh, Noida, India

Paper ID 724: Sucheta Gupta, Rajan Patel, Rajesh Gupta, Sudeep Tanwar and Nimisha Patel, "A Survey on Resource Allocation Schemes in Device-to-Device Communication".

Paper ID 721: Vishwa Amitkumar Patel, Pronaya Bhattacharya, Dr. Sudeep Tanwar, Nilesh Kumar Jadav and Rajesh Gupta, "BFLEdge: Blockchain based federated edge learning scheme in V2X underlying 6G communications".

Paper ID 220: Aayush Agarwal and Shilpi Sharma, "Performance Evaluation Of Hsrp, Glbp And Vrrp With Interior Gateway Routing Protocol And Exterior Gateway Routing Protocol".

Paper ID 426: Vivek Kanwar, Surekha Rani, Amandeep Kaur, Anil Behal, Debarati Nath and Neha Sharma, "DV-Hop Localization based energy efficient Algorithm for Wireless Sensor Networks".

Paper ID 295: Prabhat Singh, Prof. Abhay Bansal, Sunil Kumar and Prof. Ahmad Kamal, "Road Monitoring and Sensing System".

Paper ID 359: Amit Shakya and Surinder Singh, "Designing of a Novel PCF Biosensor having Octagonal Core and based on Surface Plasmon Resonance for Chemical and Heavy Metal Sensing".

Paper ID 310: Gholamreza Ramezan, Amr Abdelnasser, Yashar Ganjali, "Know me: A Module to Improve the Efficiency of Resource Allocation in Data Centre networks".

14:00 Hrs- 15:30 Hrs

Paper Presentation Track 1B- AI & Soft Computing

Session Chair: Prof. (Dr.) Sushila Madan, Lady Shri Ram College, DU, Delhi, India

Session Co-Chair: Dr. Sanjay Kumar Dubey, Amity University Uttar Pradesh, Noida, India

Paper ID 707: Hritik Shanbhag, Pooja Agarwal, Arti Arya, Varun Seshu, Samrudhi Rao and Disha Venkatesh, "Performance Analysis of Bollinger Bands and Long Short-Term Memory(LSTM) models based Strategies on NIFTY50 Companies".

Paper ID 367: Pothula Manjeera, G.V. Nageshkumar and Vempalle Rafi, "Design and Implementation of Fuzzy logic-2DOF controller for Emulation of wind turbine System".

Paper ID 433: Tanay Agrawal, Sarita Sheoran, Sumanta Pasari and Sakshi Shukla, "Wind Speed Prediction with Spatio Temporal Correlation using Convolutional and Spiking Neural Networks".

Paper ID 273 "Lilapati Waikhom and Ripon Patgiri, "Recurrent Convolution based Graph Neural Network for Node Classification in Graph structure data".

Paper ID 179: Pulkit Dwivedi and Anushka Upadhyaya, "A Novel Deep Learning Model for Accurate Prediction of Image Captions in Fashion Industry".

Paper ID 227: Mary Mathews, Dr Prabu M, Dr Arish Pitchai, Derin Robert and Raahul G, "Mary Mathews, Dr Prabu M, Dr Arish Pitchai, Derin Robert and Raahul G".

14:00 Hrs- 15:30 Hrs

Paper Presentation Track 3B- Big Data & Data Mining

Session Chair: Dr. Deepak Gupta Maharaja Agrasen Institute of Technology, Delhi, India

Session Co-Chair: Dr. Rajni Sehgal, Amity University Uttar Pradesh, Noida, India

Dr. Saumya Ranjan Nayak, Amity University Uttar Pradesh, Noida, India

Paper ID 468: Misha Kakkar, Sachin Aggarwal and Shoaib Showkat Khan, "Analyzing opinion of different countries for recent events in Afghanistan using text mining".

Paper ID 466: Revathi Nambiar and Deepa Gupta, "Dedicated Farm-Haystack Question Answering System for Pregnant Women and Neonates Using Corona Virus Literature".

Paper ID 298: Natansha Sahgal, Arushi Gulati, Neetu Narayan, Avneesh Atrey and Jitendra Singh Jadon, "Mining Influence of people on Viral Marketing".

Paper ID 437: Stuti Tandon, Vijay Kumar and V.B. Singh, "An empirical analysis of code smells using CRITIC-TOPSIS method".

Paper ID 316: Kanishka Negi, Gaddam Prathik Kumar, Subrata Sahana, Gaurav Raj and Vishal Jain, "Degree of Accuracy in Credit Card Fraud Detection Using Local Outlier Factor and Isolation Forest Algorithm"

Paper ID 38: Akbar Gani, Asif Khan and Khushnood Abbas, "Covid-19 Vaccination Concerns and its way out in Rustic Zones.

14:00 Hrs- 15:30 Hrs

Paper Presentation Track 8H-Machine Learning

Session Chair: Dr. Deepti Kakkar, NIT, Jalandhar, India

Session Co-Chair: Ms. Seema Sharma, Amity University Uttar Pradesh, Noida, India

Paper ID 205: Kaushiki Raj Srivastava and Nancy Girdhar, "Retinal Image Segmentation based on Machine Learning Techniques"

Paper ID 401: Avneesh Atrey, Neetu Narayan, Surbhi Vijn and Sumit Kumar, "Analysis of Breast Cancer using Machine Learning Methods"

Paper ID 31: Astha Singh, Madhulika Bhatia and Anchal Garg, "Prediction of abnormal pregnancy in pregnant women with Advanced maternal age and Pregestational Diabetes using Machine learning models"

Paper ID 666: Monika Khandelwal, Ranjeet Kumar Rout and Saiyed Umer, "Prediction of protein-protein interaction from protein sequences using supervised machine learning algorithm"

Paper ID 70: Tarun Jain, Aditya Sinha and Vivek Kumar Verma, "SMS Spam Classification Using Machine Learning Techniques"

Paper ID 353: Mukund Kumar Roy, Garima Aggarwal, Abhay Bansal and Deeksha Juneja, "Open domain Conversational Model using transfer learning"

14:00 Hrs- 15:30 Hrs

Paper Presentation Track 6A- Image/Video Processing

Session Chair: Dr. Vishal Goyal, Professor, Punjabi University, India

Session Co-Chair: Dr. Prabhishkek Singh, Amity University Uttar Pradesh, Noida, India

Paper ID 485: Selva Birunda S, Nagaraj P, Krishna Narayanan S, Muthamil Sudar K and Muneeswaran V, "Deep Learning Solution for Fake Image Analytics in Online Social Platform Applications".

Paper ID 46: Clay Motupalli, Mohinth Rp, Shivam Gaur, Vishesh Mittal and Surya Prakash, "Supervision of Video Game Car Steering Implementing HORCNN Network".

Paper ID 577: Vibhanshu Singh Sindhu, Yash Sant, Ruchika Malhotra and Indu Sreedevi, "The HWDI Dataset of Camera Captured Warped Hindi Text Document Images".

Paper ID 284: Faritha Banu J, Muneeshwari P, Raja K, Suresh S, Latchoumi T P and Deepan S, "Ontology Based Image Retrieval by Utilizing Model Annotations and Content".

Paper ID 440: Akansha Vishwakarma and Mahesh Parsai, "Image Steganography using Improved Exploiting Modification Direction"

Paper ID 302: Ankita Kumari, Abhishek Chauhan and Abhishek Singhal, "Vision360: Image Caption Generation".

14:00 Hrs- 15:30 Hrs

Paper Presentation Track 7A- IOT & Automation

Session Chair: Prof. (Dr.) Murli M Rao, Indira Gandhi Open National University, New Delhi, India

Session Co-Chair: Dr. Sumita Gupta, Amity University Uttar Pradesh, Noida, India

Paper ID 324: Mandeep Kaur, Pankaj Deep Kaur and Sandeep Kumar Sood, "BLoT (Blockchain-based IoT) Framework for Disaster Management".

Paper ID 355: Kirti Bala and Pankaj Deep Kaur, "Changing Trends of Blockchain in IoT: Benefits and Challenges".

Paper ID 292: Navita Mehra and Pooja Mittal, "Machine Learning (ML) based Human Activity Recognition Model using Smart Sensors in IoT Environment".

Paper ID 79: C. Shyamala Kumari, Rohit Kumar, Saurav Kumar Gupta, Shourjya Hazra and Mayurakshya Paul, "Modish Energy Datum using LoRa Technology

Paper ID 288: Anshika Arora, Pinaki Chakraborty and M.P.S. Bhatia, "SleepQual and B.Health: Smartwatch and Smartphone based Behavioral Datasets of Youth".

Paper ID 148: Sachin Aggarwal and Smriti Sehgal, "Automation of Water Distribution System by Prediction of Water Consumption and Leakage Detection Using Machine Learning and IoT"

15:30 Hrs- 17:00 Hrs

Paper Presentation Track 1C- AI & Soft Computing

Session Chair: Prof. (Dr.) Divakar Yadav NIT Hamirpur, India

Session Co-Chair: Dr. Supriya Raheja, Amity University Uttar Pradesh, Noida, India

Paper ID 303: Rahul Sharma, Minakshi Kaushik, Sijo Arakkal Peious, Mahtab Shahin, Ankit Vidarthi and Dirk Draheim, "Existence of Yule Simpson Effect: Experiments with Data Scientists".

Paper ID 558: Nihar Roy, Yash Bhardwaj, Aayush Upadhyay and Harshvardhan Chauhan, "A contemplation on music recommendation systems based on emotion detection".

Paper ID 670: Ajay Kumar, Vikram Bali and Shubhangi Pandey, "Improving the efficiency of Plant-Leaf Disease detection using Convolutional Neural Network optimizer-Adam Algorithm".

Paper ID 413: Vijay Kumari, Srishti Keshari, Yashvardhan Sharma and Lavika Goel, "Context-Based Question Answering System with Suggested Questions".

Paper ID 446: Sumit Kumar, Nihar Ranjan Roy, Utsav Sharma and Aditi G, "Analysis of Customer Segmentation Clustering Techniques".

Paper ID 572: Rishabh Tiwari, Ashwani Kumar Dubey and Ashwani Kr Dubey, "Detection of Camouflaged Drones using Computer Vision and Deep Learning Techniques".

15:30 Hrs- 17:00 Hrs

Paper Presentation Track 6B- Image/Video Processing

Session Chair: Prof. (Dr.) Shelly Sachdeva, NIT Delhi, India

Session Co-Chair: Dr. Abhishek Singhal, Amity University Uttar Pradesh, Noida, India

Paper ID 287: Vibhu Gupta, Mansi Jain and Garima Aggarwal, "Sign Language to Text for Deaf and Dumb".

Paper ID 720: Usha Verma and Dr. Neelam Sharma, "Enhancing the security of Medical Images in Telemedicine using Region-based Crypto-Watermarking approach".

Paper ID 448: Tina Dudeja, Sanjay Dubey and Ashutosh Bhatt, "Implementation of Autoencoder for Super Resolution of 3D MRI Imaging using Convolution Neural Network".

Paper ID 420: Arindam Ghosh and Sanjeev Thakur, "Review of Brain Tumor MRI Image Segmentation Methods for BraTS Challenge Dataset".

Paper ID 347: Basra Jehangir, Soumya Ranjan Nayak and Sourav Shandilya, "lung cancer detection using ensemble of machine learning model".

Paper ID 428: Ayush Bhardwaj, Sushant Kumar and Aishwarya Naidu, "Predictive analysis and supervised detection for fraudulent cases in healthcare".

15:30 Hrs- 17:00 Hrs

Paper Presentation Track 8A- Machine Learning

Session Chair: Prof. (Dr.) Lata, University of Bristol, UK

Session Co-Chair: Dr. Gaurav Dubey, Amity University Uttar Pradesh, Noida, India

Paper ID 95: Uma Sharma and Chilka Sharma, "Deep Learning based Prediction of Weather using Hybrid_Stacked BI- Long Short Term Memory".

Paper ID 462: Ruchika Malhotra, Anushree Mahur and Achint, "COVID-19 Fake News Detection System".

Paper ID 313: Devansh Srivastav, Akansha Bajpai and Abhishek Singhal, "A Temporal Convolutional Neural Network Based Activity Recognition Model using a Real-Time Two-Dimensional Single Pose Estimation Framework".

Paper ID 394: Xintong You, Zhengqi Liu, Xu Yang and Xuyang Ding, "Poisoning attack detection using client historical similarity in non-iid environments".

Paper ID 81: Manoj Wairiya, G.P Sahu and Neeraj Tyagi, Manoj Wairiya, G.P Sahu and Neeraj Tyagi, "Identifying Critical Success Factor for Effective Adoption of Mobile Learning Application: An Empirical Study in Indian context".

Paper ID 270: Raj Talan, Sonia Rathee and Rashmi Gandhi, "Spatio-temporal distribution characteristics of covid-19 vaccine using Time Series Forecasting".

15:30 Hrs- 17:00 Hrs

Paper Presentation Track 1D- AI & Soft Computing

Session Chair: Prof. (Dr.) Rohit Beniwal, Delhi Technical University, India

Session Co-Chair: Dr. Renuka Nagpal, Amity University Uttar Pradesh, Noida, India

Dr. Anshul Tickoo, Amity University Uttar Pradesh, Noida, India

Paper ID 688: Puneet Aggarwal, Dr.Parita Jain, Swati Sharma and Monica Batra, "Classifying Fake News Detection Using SVM, Naive Bayes and LSTM".

Paper ID 424: Deepak Gaur, Deepti Mehrotra and Karan Singh, "Estimation of Particulate Matter PM2.5 Concentration using Random Forest Regressor with Hyperparameter Tuning".

Paper ID 319: Uttara Behera and Sumita Gupta, "An Approach of Categorization and Summarization of News using Topic Modeling".

Paper ID 204: Venkatesh Ramanna and Dilip Chaudhary, "Deep CNN Model for Non-Screen Content and Screen Content Image Quality Assessment".

Paper ID 349: Basra Jehangir and Soumya Ranjan Nayak, "GLCM Based LGBM classification for COVID-19 Analysis using Chest X-ray Images".

15:30 Hrs- 17:00 Hrs

Paper Presentation Track 8B- Machine Learning

Session Chair: Prof. (Dr.) Arun Yadav, NIT Hamirpur, India

Session Co-Chair: Dr. Geetika, Amity University Uttar Pradesh, Noida, India

Paper ID 711:C Saravanakumar, "A Constructive approach to Numerical Mapping scheme of Nucleotides for Preprocessing in Machine Learning"

Paper ID 267: Vivek Ranjan and Pragati Agrawal, "Fake News Detection: GA-Transformer And IG-Transformer Based Approach"

Paper ID 89: Rakesh Kumar Ray, Saneev Kumar Das and Sujata Chakravarty, "Smart Crop Recommender System- A Machine Learning Approach"

Paper ID 425: Ajit Kumar Rout, Abhishek Sethy and M Kousik, "Counterfeit Regulation through Machine Learning Approach and Deployment in Dockers"

Paper ID 238: Yuki Hara, Yoshikazu Fukuyama, Yuichi Shimasaki, Yuto Osada, Kenya Murakami, Tatsuya Iizaka and Tetsuro Matsui, "Feature Selection Considering Characteristics of Operating Data and Random Cut Trees for Hydroelectric Generator Fault Detection by Robust Random Cut Forest"

Paper ID 314: Sayanti Roy, R. Sathya, Jibendu Paul and Sahithi Reddy Mopuru, "Fake and Unproven Medical Remedy Detector using LSTM Model with Tensorflow Framework"

- 14:15 Hrs-14:45 Hrs(Room 1)** **Keynote address 11 by Prof. (Dr.) Sergio Marquez Sanchez, University of Salamanca, Spain on “Safe working environments thanks to the integration of artificial intelligence and wearable devices for real-time monitoring”**
- 14:15 Hrs-14:45 Hrs(Room 2)** **Keynote address 12 by Prof. (Dr.) Vassil T. Vassilev, Head of Cyber Security Research Centre, London Metropolitan University, UK on “Parameterization, Containerization, and Orchestration of Security Services on Private Cloud”.**
- 14:15 Hrs-14:45 Hrs(Room 3)** **Keynote address 13 by Prof.(Dr.) Vincenzo Piuri, Professor, University of Milan, Italy on “ Artificial Intelligence in Cloud/Fog/Edge Computing and Internet-of-Things”.**
- 14:45 Hrs-15:15Hrs(Room 1)** **Keynote address 14 by Prof. (Dr.) Keshav Dahal, University of West of Scotland, UK on “Blockchain Characteristics and its Effect in Business Models”.**
- 14:45 Hrs-15:15 Hrs(Room 2)** **Keynote address 15 by Prof. (Dr.) Gabriella Casalino, Professor, CI Lab, University of Bari, Italy on “Explainable stream data analysis: a case study on bipolar disorder disease”.**
- 14:45 Hrs-15:15 Hrs(Room 3)** **Keynote address 16 by Mr. Haru Mehra, CEO & President of Project LE FREHINDI Under The Patronaje of Indian Embassy in Paris & Project Head – University of Grenoble Indian Subcontinent edition on Future Skills: Coding Camps & Internship Opportunities for Indian Students in Europe”**
- 15:15 Hrs-15:45 Hrs(Room 1)** **Keynote address 17 by Mr. Kapil Mehrotra, CTO, National Collateral Mgmt Services Ltd., India on “Digital Leadership: The Challenges, Skills and Technology”**
- 15:15 Hrs-15:45 Hrs(Room 2)** **Keynote address 18 by Prof. (Dr.) Neelam Duhan, Professor, J. C. Bose University of Science and Technology, YMCA, Faridabad, India on “Bioinspired Computing”**
- 15:15 Hrs-15:45 Hrs(Room 3)** **Keynote address 19 by Prof. (Dr.) Silvia Liberata Ullo, Telecommunications and Remote Sensing group at the University of Sannio, Italy on “Remote Sensing for Earth Observation and Cloud Services”**
- 15:45 Hrs-16:15Hrs(Room 1)** **Keynote address 20 by Prof. (Dr.) Subhash Bhalla, Professor, University of Aizu Japan on “Healthcare Digitization Through Standardized Electronic Health Records and Databases”**
- 15:45 Hrs-16:15Hrs(Room 2)** **Keynote address 21 by Prof. (Dr.) Mohd Helmy Abd Wahab, Professor, University Tun Hussein Onn Malaysia on “Smart Application to Support Elderly and Disabled People”**
- 15:45 Hrs-16:15Hrs (Room 3)** **Keynote address 22 by Prof. (Dr.) Syed Akhter Hossain, Dean, Canadian University of Bangladesh on “Cyber Security Research: Prospects and Challenges”**
- 16:15 Hrs-16:45Hrs(Room 2)** **Keynote address 23 by Prof. (Dr.) John Domingue, Professor, Open University, UK on “Transforming Higher Education through AI: Ongoing work at The Open University”**
- 16:15 Hrs-16:45Hrs(Room 3)** **Keynote address 24 by Prof. (Dr.) O.P Sangwan, Guru Jambheshwar University, Haryana, India on “Big Data Analysis Using Machine Learning”**
- 16:45Hrs-17:15Hrs(Room 2)** **Keynote address 25 by Mr. Rajiv Singh, CTO Sopra Steria**
- 16:45Hrs-17:15Hrs(Room 3)** **Keynote address 26 by Prof. (Dr.) Anand Nayyar, Researcher and Scientist at Duy Tan University, Vietnam on “6G Technology”.**

16:15 Hrs- 17:30 Hrs (Room 1) Joint Session with IEEE Sight: Inspiring Story of Young Global Engineers

**Panellist: Prof. (Dr.) Abhay Bansal, Director-DICET, Joint Head-ASET
Dr. M.A. Ansari, IEEE HAC-SIGHT, UP Section, India**

Mr. Piyush Arora, Senior Interaction Designer, Google, USA
Ms. Saniya Sahdev, Senior Technology Consultant, Ernst & Young, USA
Mr. Sagar Solanki, Engineer, Facebook, USA
Ms. Katha Chanda, Software Engineer, Microsoft, USA
Ms. Shreya Sahani, Software Development Engineer, Amazon, USA
Mr. Shivang Kumar, Operations Lead, ANZ, Melbourne, Australia
Ms. Pooja Prashar, Software Developer, Oracle, USA
Mr. Mihir Sardana, Analyst, Goldman Sachs, USA
Mr. Karan Raizada, Amazon, Canada
Mr. Piyush Khatreja, Assistant Vice President, Credit Suisse, USA

17:30Hrs-18:30Hrs (Room 1) “CXO Forum” on Explosive Impact of Digitization

Mr. George Paul, CEO, MAIT
Mr. Manoj Chug, President - Group Public Affairs. Member Group Executive Board, Mahindra & Mahindra
Mr. Pramod Agrawal, Vice President and Regional CTO (IMEA), Automation Anywhere
Mr. Sandeep Parikh, Partner and Leader Intelligent Automation, EY
Mr. Sumit Sardana, Chief Operating Office, mCarbon Tech Innovations Pvt. Ltd.

17:15Hrs-17:45Hrs (Room 2) Keynote address 27 by Prof. (Dr.) P.S. Grover, Ex-Director Delhi University, India on “AI and Social Good”

17:15Hrs-17:45Hrs (Room 3) Keynote address 28 by Prof. (Dr.) Basanta Joshi, Tribhuvan University, Nepal on “Insider Threat Detection using Deep Learning”

17:45Hrs-18:15Hrs(Room 2) Keynote address 29 by Prof. (Dr.) Arun Somani, Senior Associate Dean, College of Engineering, Iowa State University, USA on “Neural Architecture Search: A Hardware Perspective”

17:45Hrs-18:15Hrs(Room 3) Keynote address 30 by Prof. (Dr.) Josiah Dykstra, Technical Fellow in the Cybersecurity Collaboration, Center, National Security Agency, USA on “Partnering for Prevention in Modern Cybersecurity”

Day 2: Friday, January 28, 2022

- 09:15Hrs – 9:45 Hrs (Room 1)** **Keynote address 31 Prof. (Dr.) Vijayan Sugumaran, Oakland University, USA on “Data Analytics and Privacy Issues for wearable Technologies in Healthcare”**
- 09:15Hrs – 9:45 Hrs (Room 2)** **Keynote address 32 by Prof. (Dr.) Bhuvanesh Unhelkar, University of South Florida, USA on “Artificial Intelligence for Business Optimization: Approaches to combining Data Models with Process Models”.**
- 09:15Hrs – 9:45 Hrs (Room 3)** **Keynote address 33 by Prof. (Dr.) Shampa C, Netaji Subhash University of Technology, NSIT, DELHI on “Bringing alive big data with blockchain and AI”**
- 09:45Hrs – 10:15 Hrs (Room 1)** **Keynote address 34 by Prof. (Dr.) Ankit Agrawal, Northwestern University, USA on “AI + HPC for Accelerating Science”**
- 09:45Hrs – 10:15 Hrs (Room 2)** **Keynote address 35 by Prof. (Dr.) Katina Michael, Professor, Arizona State University, USA on “Cloud Computing Data Breaches in News Media: Disclosure of Personal and Sensitive Data”.**
- 09:45Hrs – 10:15 Hrs (Room 3)** **Keynote address 36 by Prof. (Dr.) Omar Cheikhrouhou, Higher Institute of Computer Science of Mahdia, Tunisia on “Blockchain for the Cybersecurity of smart city applications”**
- 10:00 Hrs- 11:00 Hrs** **Paper Presentation: Track 8C Machine Learning**
Session Chair: Prof. (Dr.) Brijesh Kumar, Madan Mohan Malaviya University of Technology, Gorakhpur, India
Session Co-Chair: Dr. Sumit Kumar, Amity University Uttar Pradesh, Noida, India
- Paper ID 461: Parv Rastogi, Eksha Singh, Vanshika Malik, Abhishek Gupta and Surbhi Vijn, “Detection Of Malicious Cyber Fraud using machine learning techniques”.
- Paper ID 272: Priyanshi Gupta, Akshit Malik and Surbhi Vijn, “Towards a stock price prediction on time series data using Long-Short Term Memory Method”.
- Paper ID 704: Anurag Sinha, Md Ramish, Sarita Kumari, Dr. Pooja Jha and Manish Kumar Tiwari, “ANN-ANT-LION-MLP Ensemble Transfer Learning Based Classifier for Detection and Classification of Oral Disease Severity”.
- Paper ID 145: Saloni Mittal, Nirbhay Kashyap and Rahul Verma, “Prediction of heart disease using machine learning techniques”.
- 10:00 Hrs- 11:00 Hrs** **Paper Presentation: Track 8D Machine Learning**
Session Chair: Prof. (Dr.) Vinay Rishiwal, MJP Rohilkhand University, Bareilly, UP, India
Session Co-Chair: Dr. Manoj Kumar Shukla, Amity University Uttar Pradesh, Noida, India
- Paper ID 384: Abhisek Sethy, Ajit Kuma Raut and Soumya Ranjan Nayak, “Face Recognition Based Automated Recognition System”.
- Paper ID 159: Ayushi Shal and Richa Gupta, “A comparative study on malaria cell detection using computer vision”.
- Paper ID 218: Saumya Gupta and Supriya Raheja, “Stroke Prediction using Machine Learning Methods”
- Paper ID 442: Surbhi Bhatia, Malak Alhaider and Maitha Alarjani, “Sentiment Analysis for Arabic Tweets on Covid-19 Using Computational Techniques”.

10:00 Hrs- 11:00 Hrs

Paper Presentation: Track 8G Machine Learning

Session Chair: Prof. (Dr. Shampa C, Netaji Subhash University of Technology, NSIT, Delhi, India

Session Co-Chair: Dr. Shipra Shukla, Amity University Uttar Pradesh, Noida, India

Paper ID 399: Rohit Swami, Smiti Khurana, Shubham Singh, Sanjeev Thakur and Pavan Kumar Reddy Sajjala, "INR Classification using Deep Learning Techniques".

Paper ID 547: Rashmi Gandhi, Ashok Kumar Yadav, Aakanshi Gupta and Sonia Rathee, "Comparative Analysis of Object Detection Algorithms using Deep Learning for Animal Safety".

Paper ID 72: Rishi Gupta, Anita Shrotriya, Tarun Jain and Aditya Sinha, "Demographic Customer Segmentation of banking users Based on k-prototype methodology".

Paper ID 641: Huma Parveen, Syed Wajahat Abbas Rizvi and Praveen Shukla, "Disease Risk Level Prediction Using Ensemble Classifiers: An Algorithmic Analysis".

11:30 Hrs – 13:00 Hrs

Paper Presentation: Track 8E Machine Learning

Session Chair: Dr. Amit Agarwal · Director, Dr. APJ Abdul Kalam Govt. Institute of Technology, Tanakpur, India

Session Co-Chair: Dr. Shilpi Sharma, Amity University Uttar Pradesh, Noida, India

Paper ID 465: Nidhi Goyal, Sumit Kumar and Mukesh Saraswat, "Detection of Unhealthy citrus leaves using Machine Learning technique".

Paper ID 436: Simran Khanna, Aditya Gupta, Shivam Arora and Sumita Gupta, "Digitization of Handwritten text using Deep Learning".

Paper ID 395: Sakshi Kalra, Chitneedi Hemanth Sai Kumar Kumar, Yashvardhan Sharma and Gajendra Singh Chauhan, "Comparative Analysis of Various Machine Learning Based Techniques for Predicting the Virality of Tweets".

Paper ID 447: Sumit Kumar, Aditi G, Utsav Sharma and Jitendra Singh Jadon, "A Quantitative Performance Evaluation of Machine Learning for Analyzing Sentiments of Emotions".

Paper ID 370: Mukund K Roy and Ushaben Keshwala, "Res2Net based Text Independent Speaker recognition system".

Paper ID 457: Swati Chandna and Abhishek Singhal, "Towards Outdoor Navigation System for Visually Impaired People using YOLOv5".

11:30 Hrs - 13:00 Hrs

Paper Presentation: Track 8F Machine Learning

Session Chair: Prof. (Dr.) Neelam Duhan, J. C. Bose University of Science and Technology, YMCA, Faridabad, India

Session Co-Chair: Dr. Rakesh Garg, Amity University Uttar Pradesh, Noida, India

Paper ID 719: Nikhila Korivi, Sai Naveen Katla, Godavarthi Chandra Keerthi and Manikandan V M, "A Novel Stock Price Prediction Scheme from Twitter data by using Weighted Sentiment Analysis".

Paper ID 429: Abdullah Ikram, Mohit Kumar and Dr. Geetika Munjal, "Twitter Sentiment Analysis using Machine Learning".

Paper ID 682: Khanyisile Sixhaxa, Ritesh Ajoodha and Ashwini Jadhav, "Predicting Students Performance in Exams using Machine Learning Techniques".

Paper ID 208: Neha Arora, Sindhu Hak Gupta and Basant Kumar, "Symbol Error Rate based approach to explore the best location for central node placement in On-body WBAN".

Paper ID 167: Leena, Haorangbam, Renuka Nagpal, Rajni Sehgal, "Service Oriented Architecture (SOA): A literature Review on maintainability, Approaches and Design Process".

Paper ID 411: Milind Soam, Dr. Sanjeev Thakur, "Next Word Prediction Using Deep Learning: A Comparative Study".

- 10:15 Hrs- 10:45 Hrs (Room 1)** Keynote address 37 by Prof. (Dr.) Alamgir Hussain, Vice President & Professor of Artificial Intelligence Cambodia University of Technology & Science (CamTech) Phnom Penh, Cambodia.
- 10:15 Hrs- 10:45 Hrs (Room 2)** Keynote address 38 Prof. (Dr.) T.V. Vijay Kumar, Jawaharlal Nehru University, India on “Challenges and Opportunities in AI & Data Science”
- 10:15 Hrs- 10:45 Hrs (Room 3)** Keynote address 39 by Prof. (Dr.) Subarna Shakya, Institute of Engineering, Tribhuvan University, Nepal on “Cloud Governance Challenges”
- 10:45 Hrs- 11:15 Hrs (Room 1)** Keynote address 40 Prof. (Dr.) Y C Tay, Professor, NUS, Singapore on “A simple equation for citation curves”.
- 10:45 Hrs- 11:15 Hrs (Room 2)** Keynote address 41 by Prof. (Dr.) Hari Mohan Pandey, Edge Hill University, UK on “Novel Metaheuristic Algorithm for Cluster Head Selection in Wireless Sensor Network”
- 10:45 Hrs- 11:15 Hrs (Room 3)** Keynote address 42 by Prof. (Dr.) Muhammad Rukunuddin Ghalib, School of Engineering & Computing, De Monfort University, Dubai on “AI-Joining Right Pieces Together in a Right Way”
- 11:45-13:00 Hrs (Room 1)** **HR Conclave: Industry Expectations from Young Professionals in New Normal**
 Mr. Amulya Sah, CHRO, Team Computers
 Mr. Mukesh Batra, Vice President-HRIS (Human Resource Information System), Motherson Sumi Infotech & Designs Limited
 Ms. Shalini Juahri, Head Talent Acquisition, Indurance Technologies Ltd.
 Mr. Bino Kumar, Head Talent Acquisition, Groupon
 Mr. Amit Kumar Sinha, Head Talent Acquisition, Samsung R&D (Ex- Adobe, Amazon)
 Mr. Joginder Tuteja, Sr. Director - Recruitment & HR, AXTRIA
- 11:30 Hrs – 12:00Hrs (Room 2)** Keynote address 43 by Prof. (Dr.) Vishal Goyal, Professor, Punjabi University, India on “Shodhmapak: A Plagiarism detection tool for Indian languages”
- 11:30 Hrs – 12:00Hrs (Room3)** Keynote address 44 by Prof. (Dr.) Celestine Iwendi, Professor, School of Creative Technologies University of Bolton, UK on “Next Generation AI in Creative Technology”.
- 12:00 Hrs – 12:30Hrs (Room 2)** Keynote Address 45 by Prof. (Dr.) Violetta E. PIPERIGOU, Professor, University of Patras, Greece on “Regression Analysis Techniques in Data Science”.
- 12:00 Hrs – 12:30 Hrs (Room 3)** Keynote address 46 by Prof. (Dr.) Shelly Sachdeva, Professor, NIT Delhi
- 12:30 Hrs – 13:00Hrs (Room 3)** Keynote address 47 by Prof. (Dr.) Masoud Mohammadian, Professor, Canberra University, Australia
- 14:00 Hrs- 15:30 Hrs (Room 1)** **Panel Discussion: Academia-Industry Linkage: A necessity for creating national innovation ecosystem**
 Prof. (Dr.) S.K. Garg, Pro Vice Chancellor, Delhi Technical University, India
 Mr. Lokesh Mehra, Head AWS
 Mr. Harsha Kankanala, Founder Edwisely
 Mr. Ashish Gupta, Vice President and Head of Software, Barco India
 Mr. Satya Sekhar Das Mandal, CTO, Infoview Systems
 Dr. Niraj Prakash, Head Professional Services, Public Sector, Amazon Web Services
 Mr. Sekhar Sahay, India Head HR, Thales Group
- 14:15 Hrs- 14:45 Hrs (Room2)** Keynote Address 48 by Mr. Ashish Adhikari, Principal PM Manager at Microsoft
- 14:15 Hrs- 14:45 Hrs (Room3)** Keynote Address 49 by Prof. (Dr.) Mike Hinchey, Former Director, Irish Software Engineering Research Centre, Professor, University of Limerick, Ireland on “Building Resilient Space Exploration Missions”

15:30 Hrs– 18:00 Hrs (Room 1)	Valedictory Function
15:30 Hrs – 15:35 Hrs	Lamp Lighting
15:35 Hrs – 15:40 Hrs	Welcome Address by Prof. (Dr.) Abhay Bansal, Jt. Head Amity School of Engineering & Technology, Director DICET & General Chair, Confluence-2022
15:40 Hrs – 15:45 Hrs	Address by Prof. (Dr.) Manoj Kumar Pandey, Jt. Head, Amity School of Engineering & Technology
15:45 Hrs - 15:52 Hrs	Brief Summary Report of Confluence 2022 by Organizing Secretary, Confluence 2022
15:52 Hrs – 16:00 Hrs	Address by Prof. (Dr.) Balvinder Shukla, Vice Chancellor, AUUP & Co-Patron, Confluence 2022
16:00 Hrs- 16:07 Hrs	Address by Guest of Honor, Prof. (Dr.) Mohamed Ibrahim bin Abdul Mutalib, Vice Chancellor, UTP, Malaysia
16:07 Hrs – 16:14 Hrs	Address by Guest of Honor, Prof. (Dr.) Satish K. Singh, Professor, IIT Allahabad, Chairman, IEEE UP Section, India
16:14 Hrs – 16:21 Hrs	Address by Guest of Honor, Prof. (Dr.) Mike Hinchey, Professor, University of Limerick, Ireland
16:21 Hrs- 16:28 Hrs	Address by Guest of Honor, Prof. (Dr.) S.N. Singh, Professor, IIT Kanpur, IEEE India Council Immediate Past-Chair, India
16:28 Hrs- 16:50 Hrs	Keynote Address by Prof. (Dr.) Peter Robinson, Professor, Cambridge University, UK on “Extended Reality- Past, Present and Future”
16:50 Hrs- 17:23 Hrs	Conferring Honorary Professorships & Awards
17:23 Hrs- 17:30 Hrs	Address by Guest of Honor, Mr. Sudhir Aggarwal, Director Strategic, Microsoft
17:30 Hrs- 17:37 Hrs	Address by Guest of Honor, Prof. (Dr.) Bhiksha Ramakrishnan, Professor, Carnegie Mellon University, USA
17:37 Hrs-17:42 Hrs	Address by Guest of Honor, Prof. (Dr.) Sartaj Sahni, Professor, Florida State University, USA
17:42 Hrs – 17:49 Hrs	Address by Guest of Honor, Prof. (Dr.) David Gries, Professor, Cornell University, USA
17:49 Hrs- 17:56 Hrs	Address by Guest of Honor, Prof. (Dr.) Shiao-fen Fang, Chair, Department of Computer and Information Science, Director, Indiana University Purdue University, USA
17:56 Hrs – 18:03 Hrs	Few Thoughts by Dr. Atul Chauhan, Chancellor, AUUP & President RBEF, Patron, Confluence 2021
18:03 Hrs – 18:10 Hrs	Few Thoughts by Dr. Ashok K Chauhan, Founder President, Amity Education Group & Chairman AKC Group of Companies, Patron in Chief, Confluence 2021
18:10 Hrs- 18:20 Hrs	Vote of Thanks by Prof. (Dr.) Sanjeev Thakur, HOD(CSE), ASET

