



**2020 Sixth International Conference
on
Parallel, Distributed and Grid Computing(PDGC)
06-08 November, 2020**

**Department of Computer Science & Engineering and Information
Technology**

**Jaypee University of Information Technology
Waknaghat, solan, Himachal Pradesh-173212**

Conference Record # 50313

Detailed Technical Programme Schedule





Inauguration

Chief Guest of the Function: Professor and Director Shyam Sundar Pattnaik, National Institute of Technical Teachers Training and Research. (NITTTR), Chandigarh.

Professor Vinod Kumar, Vice-Chancellor, Jaypee University of Information Technology, Waknaghat

Professor Samir Dev Gupta, Dean & HoD-CSE&IT, Jaypee University of Information Technology, Waknaghat

Dr. Hemraj Saini, Conference General Chair, PDGC-2020

Time: 10:00AM-11:10AM

Keynote Talk-1: Automated deployment and autoscaling of secure cloud-native applications

Tamas Kiss, Director of Research Centre for Parallel Computing

Professor, School of Computer Science and Engineering, University of Westminster

Time: 12:00PM-13:00PM

Session-01.1: Security and Privacy Preservation Techniques for IoT and Cloud Computing

Session Chair(s):

Dr.Gautam Kumar; CMR Engineering College Hyderabad

Mr.Naveen Kumar, DIT University, Dehradun

Date: 6th November, 2020

Time: 14:00-15:00

Sr.No	EDAS ID	Paper Title	Presenter
1	1570672593	Role of Indian IT Laws in Smart Healthcare Devices in the Intensive Care Unit in India	Gaurav Deep
2	1570674422	Comparative Analysis of Different Symmetric Encryption Techniques Based on Computation Time	Nishant Agnihotri
3	1570675403	A Study on Analysing the impact of Feature Selection on Predictive Machine Learning Algorithms	Ramya Balabhadrapathruni
4	1570675553	TCB Minimization towards Secured and Lightweight IoT End Device Architecture using Virtualization at Fog Node	Prateek Mishra

Session-01.2: Security and Privacy Preservation Techniques for IoT and Cloud Computing

Session Chair(s):

Dr.Vivek Sehgal, Jaypee University of Information Technology, Waknaghat





Dr.Vijender Solanki, CMR Institute of Technology, Hyderabad

Date: 6th November, 2020

Time: 14:00-15:00

Sr.No	EDAS ID	Paper Title	Presenter
1	1570681586	Malware Detection Techniques: A Survey	Dammu Sowjanya and Supriya Yamjala
2	1570676633	A Novel Perspective to Threat Modelling using Design Thinking and Agile Principles	Suman De
3	1570677761	Android Malware Detection Using Chi-Square Feature Selection and Ensemble Learning Method	Meghna Dhalaria
4	1570678607	An Empirical Study of Cybercrime and Its Preventions	Jessicaa Singh
5	1570675865	Improved Max-Min Algorithm for Resource Allocation in Cloud Computing	Pandaba Pradhan

Session-02.1: Parallel, Distributed and Grid Computing Applications and Technologies

Session Chair(s):

Dr.Rakesh Saini, DIT University, Dehradun

Mr.Ravindra Sharma, Swami Rama Himalayan University, Dehradun

Date: 6th November, 2020

Time: 14:00-15:00

Sr.No	EDAS ID	Paper Title	Presenter
1	1570659218	Semantic Information Retrieval Using String Ontology in Music Domain Using Protege5.0	Najot Kaur
2	1570665953	Agriculture monitoring and prediction using Internet of Things (IoT)	Mohit Kumar Saini
3	1570666227	Prediction and Monitoring of Air Pollution Using Internet of Things	Sariya Jiyal
4	1570667953	Indian Health Care System is Ready to Fight Against COVID-19 A Machine Learning Tool for Forecast the Number of Beds	Shakti Nagpal
5	1570672718	Intrusion Detection and Prevention system using Cuckoo search algorithm with ANN in Cloud Computing	Anushikha Gupta

Session-02.2: Parallel, Distributed and Grid Computing Applications and Technologies





Session Chair(s):

Dr.Yugal Kumar, Jaypee University of Information Technology, Wagnaghat
Dr.Rahul Deo Sah, Dr Shyama Prasad Mukherjee University, Ranchi

Date: 6th November, 2020

Time: 14:00-15:00

Sr.No	EDAS ID	Paper Title	Presenter
1	1570674604	Energy Efficient Quad Clustering based on K-means Algorithm for Wireless Sensor Network	Bhawmesh Kumar
2	1570675354	Hybrid Job Scheduling in Distributed Systems based on Clone Detection	Uddalok Sen
3	1570675667	Digital Image splicing Detection Using RIC-LBP Feature Extraction Technique	Vikas Srivastava
4	1570675670	Similarity Measure Approaches Applied in Text Document Clustering for Information Retrieval	Naveen Kumar
5	1570678735	A Multi-Factor Access Control and Ownership Transfer Framework for Future Generation Healthcare Systems	Vidyadhar Jinnappa Aski

Session-03.1: Interconnection Networks and Network based Computing

Session Chair(s):

Dr.Hari Singh Rawat, Jaypee University of Information Technology, Wagnaghat

Date: 6th November, 2020

Time: 14:00-15:00

Sr.No	EDAS ID	Paper Title	Presenter
1	1570674154	Comparative Analysis of Clustering Techniques for Deployment of Roadside Units	Kumar Satyajeeet
2	1570675407	RPSO optimization with machine learning in WSN	Yogesh Pant
3	1570678954	Classification of Routing Protocols for Under Water Sensor Network	Rani Astya and Nitin Kumar
4	1570687785	Group Key Management in Cloud for Shared Media Sanitization	Manoj Kumar Shukla

Session-04.1: Machine learning and Artificial Intelligence in Real Life

Session Chair(s):

Dr.Ravindara Bhatt, Jaypee University of Information Technology, Wagnaghat

Dr.Puneet Jain, NIT, Raurkela

Date: 6th November, 2020





Time: 14:00-15:00

Sr.No	EDAS ID	Paper Title	Presenter
1	1570673673	A prospective study to assess the association between emotion and disease: Wrist Pulse Signals	Nidhi Garg
2	1570675272	Heterogeneous Stacked Ensemble Classifier for Software Defect Prediction	Somya Goyal
3	1570668374	Hybrid Genetic and Simulated Annealing Algorithm for Capacitated Vehicle Routing Problem	Mohammad Sajid
4	1570675005	Data analysis of various terrorism activities using big data approaches on Global Terrorism Database	Bhavya Chhabra

Keynote Talk-2: Emerging Challenges in Distributed Energy Grid for Sustainable and Secure Future Society

David (Bong Jun) Choi, Ph.D., SMIEEE

Professor, School of Computer Science and Engineering (Joint Appointment: School of Electronic Engineering - IT Convergence)

College of Information Technology, Soongsil University, Seoul, Korea

Time: 16:00-17:00

Session-05.1: Distributed Computing, AI and Machine Learning : Applications, Challenges and Implementation Techniques

Session Chair(s):

Dr.Rajni Mohana, Jaypee University of Information Technology, Waknaghat

Dr.Dinesh Chander Verma, Panipat Institute of Engineering and Technology, Panipat

Date: 6th November, 2020

Time: 16:00-17:00

Sr.No	EDAS ID	Paper Title	Presenter
1	1570667836	A Secured Automated Attendance Management System Implemented with Secret Sharing Algorithm A Solution in Pandemic Outreach of Covid-19	Shakti Arora
2	1570675459	Exploring the Role of Vegetation Indices in Plant Diseases Identification	Deepak Sinwar
3	1570673006	Predictive of Solar Radiation using Hybrid Discriminant-Neural Network	Rakhee
4	1570677186	BotEye: Botnet Detection Technique Via Traffic	Jagdish Yadav





5	1570671443	Flow Analysis Using Machine Learning Classifiers Load Balancing In Heterogeneous Distributed Systems Using Singleton Model	Mamta C. Padole
---	------------	--	-----------------

Session-05.2: Distributed Computing, AI and Machine Learning : Applications, Challenges and Implementation Techniques

Session Chair(s):

Dr.Ekta Gandotra, Jaypee University of Information Technology, Waknaghat

Dr.Rajneesh Gujral, M M Deemed University, Ambala

Date: 6th November, 2020

Time: 16:00-17:00

Sr.No	EDAS ID	Paper Title	Presenter
1	1570677796	Survey on Recent Cluster Originated Energy Efficiency Routing Protocols For Air Pollution Monitoring Using WSN	Ekta Dixit
2	1570679123	A machine learning approach to Human Activity Recognition	Umra Khan
3	1570679641	A Comparative Study on Vehicles Safety Systems Integrating Genetic Algorithm with Random Forest	Aman Agrawal
4	1570680752	for Improving the Classification Performance of Web Log Data	Varun Malik
5	1570675158	Detecting Malignancy of Ovarian Tumour using Convolutional Neural Network: A Review	Mansi Mathur

Session-06.1: Learning and Meta Heuristic Algorithms for Optimization for Cloud

Session Chair(s):

Dr.Punit Gupta, Manipal University, Jaipur

Dr.Pardeep Kumar, Jaypee University of Information Technology, Waknaghat

Date: 6th November, 2020

Time: 16:00-17:00

Sr.No	EDAS ID	Paper Title	Presenter
1	1570668501	Election Result Prediction Using Twitter Sentiments Analysis	Aditi Saxena
2	1570676930	Efficient Task Allocation For Cloud Using Bat Algorithm	Anant Kumar Jayswal
3	1570673453	Improving the Efficiency of Automated Latent Fingerprint Identification Using Stack of	Megha Chhabra





Convolutional Auto-encoder

4	1570673875	IoT and Cloud Based Healthcare Solution for Diabetic Foot Ulcer	Navaditya Gaur
5	1570677305	Text document representation and classification using Convolution Neural Network	Shikha Mundra

Session-07.1: Evolving Technologies for Computing and Data Analytics

Session Chair(s):

Dr. Shruti Jain, Jaypee University of Information Technology, Waknaghat

Dr. Meenakshi Sood, NITTTR, Chandigarh

Date: 6th November, 2020

Time: 16:00-17:00

Sr.No	EDAS ID	Paper Title	Presenter
1	1570667935	FPGA-Based Parallel Prefix Speculative Adder for Fast Computation Application	Garima Thakur
2	1570673560	Stock Price prediction using LSTM and SVR	Gourav Bathla
3	1570673842	A Review on Advanced Techniques of Requirement Elicitation and Specification in Software Development Stages	Tende Ivo Sake
4	1570668909	Optimizing trace tool-overhead for lock-intensive multi-threaded parallel applications	Ajit Singh
5	1570679048	Twitter Sentiment Analysis During Unlock Period of COVID-19	Swati Sharma

Session-08.1: Neural Networks and Deep Learning based Methods for Digital Image Processing

Session Chair(s):

Dr. Ashwani Kumar, Vardhaman Engineering College, Hyderabad, Telangana

Dr. Dileep Yadav, Jawaharlal Nehru University, New Delhi

Date: 6th November, 2020

Time: 16:00-17:00

Sr.No	EDAS ID	Paper Title	Presenter
1	1570675811	A Review on Machine Learning Techniques for Prediction of Cardiovascular Diseases	Savita
2	1570675927	A comparative Analysis of Deep Learning Models Applied for Disease Classification in Bell pepper	Nidhi Kundu
3	1570677133	Forgery Detection for High-Resolution Digital	Satinder Jeet Kaur





4	1570675091	Images using FCM and PBFOA Algorithm A Secure and Distributed Framework for sharing COVID-19 patient Reports using Consortium Blockchain and IPFS	Randhir Kumar
5	1570675305	A Convolutional Neural Network Approach for The Diagnosis of Breast Cancer	Gitanjali Wadhwa

Session-08.2: Neural Networks and Deep Learning based Methods for Digital Image Processing

Session Chair(s):

Dr.Raman Dugyala, Jawaharlal Nehru Technological University, Hyderabad
Dr.Ruchi Verma, Jaypee University of Information Technology, Wanknaghat

Date: 6th November, 2020

Time: 16:00-17:00

Sr.No	EDAS ID	Paper Title	Presenter
1	1570678847	A Literature Review On Sentiment Analysis Techniques Involving Social Media Platforms	Samarth Garg and Divyansh Singh Panwar
2	1570678988	BaYcP: A novel Bayesian customer Churn prediction scheme for telecom sector	Pronaya Bhattacharya Sunita Bansal, Shreyam and Shikhar Vaish
3	1570680739	Segmented Approach to Path Planning	Deepak Mehta
4	1570680864	Swarm Intelligence based Hierarchical Routing Protocols Study in WSNs	Manoj Kumar Behera
5	1570687782	Detection of Nuclear Cataract in Retinal Fundus Image using Radial Basis Function based SVM	

Keynote Talk-3: Significance of Opinion Leader in Online Social Networks

Dr. Rahul Katarya, Senior Member IEEE

Professor, Department of Computer Science & Engineering, Officer In-Charge, International Partnership & Visitation, Office of International Affairs, Delhi Technological University (Formerly Delhi College of Engineering), (Government of NCT, Delhi) Shabad Daulatpur, Main, Main Bawana Road, Delhi 110042, India

Time: 10:00-11:00

Session-09.1: Research in Artificial intelligences, Internet of things and ML/DL as a new paradigms: Issues Opportunities and their Challenges





Session Chair(s):

Dr.Nitin Rakesh, Sharda University, Noida

Dr.Tiratha Singh, Jaypee University of Information Technology, Waknaghat

Date: 7th November, 2020

Time: 11:00-12:00

Sr.No	EDAS ID	Paper Title	Presenter
1	1570667133	Iris Based Recognition System Utilizing Wavelet Transform	Syed jaffar abbas
2	1570678371	A Hybrid Grey Wolf-Whale Optimization algorithm for optimizing SVM in Breast Cancer Diagnosis	Raghav Bansal
3	1570674587	Epilepsy Seizure Detection by using Bayesian Optimize Bi-LSTM Model	Vidhi Sood
4	1570666379	Cloud's Transformative Involvement in Managing BIG-DATA ANALYTICS for Securing Data in Transit, Storage and Use: A Study	Harmaninder Jit Singh Sidhu
5	1570674884	Robust beamforming against mismatched signal steering vector using ellipsoidal constraints	Diksha Thakur

Session-10.1: Image Processing, AI & Machine Learning: Recent Trends and Future Scope

Session Chair(s):

Dr.Himanshu Jindal, Jaypee University of Information Technology, Waknaghat

Date: 7th November, 2020

Time: 11:00-12:00

Sr.No	EDAS ID	Paper Title	Presenter
1	1570668605	Color Fading: Variation of Colorimetric Parameters with Spectral Reflectance	Deepak Sarvate
2	1570672168	A Compressed domain Based Robust and Imperceptible Digital Video Watermarking Scheme	Rakesh Ahuja
3	1570672730	Correlative Analysis of Denoising Methods in Spectral Images Embedded with Different Noises	Sangeetha Annam
4	1570672767	Operating of a Drone Using Human Intent Recognition and Characteristics of an EEG Signal	Ayushi Mangla
5	1570673480	Machine Learning in Wireless Sensor Networks: A Retrospective	Aina Mehta

Session-10.2: Image Processing, AI & Machine Learning: Recent Trends and Future Scope





Session Chair(s):

Dr.Monika Bharti, Jaypee University of Information Technology, Wagnaghat

Date: 7th November, 2020

Time: 11:00-12:00

Sr.No	EDAS ID	Paper Title	Presenter
1	1570673532	Machine Learning Technique for Wireless Sensor Networks	Rajwinder Kaur
2	1570674280	Novel Machine Learning Approach for Sentiment Analysis of Real Time Twitter Data with Apache Flume	Mamoon Rashid
3	1570674490	An empirical study of classification techniques by using machine learning classifiers	Bhawna Jyoti
4	1570674941	MotionNet architecture with Randomized Emission training strategy for adaptive bit rate video compression	Sangeeta Rao

Session-10.3: Image Processing, AI & Machine Learning: Recent Trends and Future Scope

Session Chair(s):

Dr.Vivek Sehgal, Jaypee University of Information Technology, Wagnaghat

Dr.Amol Vasudeva, Jaypee University of Information Technology, Wagnaghat

Date: 7th November, 2020

Time: 11:00-12:00

Sr.No	EDAS ID	Paper Title	Presenter
1	1570676500	Determining relation amongst movie ratings and market returns using regression analysis	Shivani Inder
2	1570677909	Automatic Rumour Detection Model on Social Media	Monika Bharti
3	1570675372	Detection of Attacks through Lateral Movement in an Organization Network	Not Presented
4	1570675428	Human Action Recognition using CNN-SVM model	Not Presented

Keynote Talk-4: Topic can be “Demystifying Data Science”

Dr. Neha Sharma, PhD(IIT(Dhanbad))

Analytics & Insights, Tata Consultancy Services, Pune

Founder Secretary, Society for Data Science | www.s4ds.org

Senior IEEE Member | Execom Member, IEEE Pune Section





Time: 12:00-13:00

Session-11.1: Emerging Applications of IoT, Deep learning and its impact on Image processing

Session Chair(s):

Dr.Rajinder Sandhu, Jaypee University of Information Technology, Wagnaghat

Date: 7th November, 2020

Time: 15:00-16:00

Sr.No	EDAS ID	Paper Title	Presenter
1	1570675096	Osmotic Computing and Related Challenges: A Survey	Akashdeep Kaur
2	1570675532	Wireless Sensor and Actuator Network(s) and its significant impact on Agricultural domain	Abhishek Khanna
3	1570677306	A Deep Learning Technique for Multi-view Prediction of Bone	Nitesh Pradhan
4	1570677375	The Prediction of Buzz in Social Internet of Things	Himanshu Jindal
5	1570679287	Low-Cost Autonomous Vehicle for Inventory Movement in Warehouses	Khan Saad Bin Hasan

Session-12.01: E-Healthcare data Analytics and Security

Session Chair(s):

Dr.Aman Sharma, Jaypee University of Information Technology, Wagnaghat

Date: 7th November, 2020

Time: 15:00-16:00

Sr.No	EDAS ID	Paper Title	Presenter
1	1570654773	Forecasting the Trend of Covid-19 Epidemic	Adhishree Bansal
2	1570668561	Neurological disease prediction using ensemble Machine Learning Model	Sukhpal Kaur
3	1570668595	Semantic driven healthcare monitoring and disease detection framework from heterogeneous sensor data	Diksha hooda
4	1570669792	A review of Machine learning based review approaches for Cricket	Vidisha

Session-12.02: E-Healthcare data Analytics and Security

Session Chair(s):

Dr.Himanshu Jindal, Jaypee University of Information Technology, Wagnaghat





Date: 7th November, 2020

Time: 15:00-16:00

Sr.No	EDAS ID	Paper Title	Presenter
1	1570672367	Cricket Activity Detection Using Computer Vision	Anuj Chauhan
2	1570680876	Customer Churn Analysis and Prediction in Banking Industry using Machine learning	Ishpreet Kaur
3	1570673642	Improving diagnostic accuracy for breast cancer using prediction-based approaches	Kamalpreet Singh Bhangu
4	1570674956	FoG Computing based IoT in Healthcare Application	Ravindara Bhatt
5	1570678738	3-Layer LSTM Model for Detection of Epileptic Seizures	Jhanvi Patel and Aparna Mahajan

Session-12.03: E-Healthcare data Analytics and Security

Session Chair(s):

Dr.Jagpreet Sidhu, Jaypee University of Information Technology, Wagnaghat

Date: 7th November, 2020

Time: 15:00-16:00

Sr.No	EDAS ID	Paper Title	Presenter
1	1570669240	Analyzing Functional Magnetic Resonance Brain Images with OpenCV2	Mamoon Rashid
2	1570678358	Analysis and Visualization of Twitter Data using R	Aman Sharma
3	1570679034	Analysis of Hybrid Fusion-Neural Filter Approach to detect Brain Tumor	Ranga Swamy Sirisati
4	1570679667	Aspect Based Sentiment Analysis of Student Housing Reviews	Aniket Mukherjee
5	1570671031	An optimal Multi-Criteria Decision-Making Framework to select best Multispecialty Hospital for surgery	Hemant Petwal

CT1: Parallel and Distributed Algorithms & Secure Computing and related Tools

Session Chair(s):

Dr.Pradeep Kumar Gupta, Jaypee University of Information Technology, Wagnaghat

Date: 8th November, 2020

Time: 11:00-12:00

Sr.No	EDAS ID	Paper Title	Presenter
1	1570671659	Using Optimization and Auction Approach:	Anju Devi





2	1570678143	Security provided to Vehicle network through Blockchain Technology	
		SMSPPRL: A Similarity Matching Strategy for Privacy Preserving Record Linkage	Narendra M. Shekokar
3	1570678789	Function Point Estimation for Portal and Content Management Projects	Ch N Santhosh Kumar
4	1570678154	GPU- accelerated QPSK Transceiver with FEC over a Flat-fading Channel	Rehan Muzammil
5	1570678750	Multi-core Implementation of Chaotic RGB-LSB Steganography Technique	Gaurav Gambhir

CT2: Networks, Interconnection Networks and Network based Computing, Multimedia & Service Networking

Session Chair(s):

Dr.Geetanjali Rathee, Jaypee University of Information Technology, Waknaghat

Date: 8th November, 2020

Time: 11:00-12:00

Sr.No	EDAS ID	Paper Title	Presenter
1	1570667776	A Non-Intrusive Approach for Driver's Drowsiness Detection	Kriti Verma
2	1570667787	Plant Disease Detection Using Clustering Based Segmentation and Neural Network	Aditya Mohan
3	1570675665	Improvement of Searching Methodology for Network Applications using Bloom Filters and Hashing	Dhiraj Pandey
4	1570678782	Comparative Analysis of Feature Detection and Extraction Techniques for Vision-based ISLR system	Akansha Tyagi
5	1570679093	A Switch Based Power Aware VM Consolidation Method for Cloud Datacenter	Shally V

CT3: Dependable, Cluster and Grid Computing

Session Chair(s):

Dr.Suman Saha, JK Lakshmiipat University, Jaipur

Dr.Mrityunjay Singh, Jaypee University of Information Technology, Waknaghat

Date: 8th November, 2020

Time: 11:00-12:00





Sr.No	EDAS ID	Paper Title	Presenter
1	1570675963	Advancement of Shopping Handcart for Supermarket	Rakesh Ranjan
2	1570678814	Issues with Routing in Software Defined Network	Amit Nayyer
3	1570678828	Comparative Study of Genetic Algorithm and Artificial Neural Network for Multi-class Classification based on Type-2 Diabetes Treatment Recommendation model	Payal Bhandari
4	1570679281	Writer Identification System Based on Offline handwritten Text in Gurumukhi Script	Shaveta Dargan
5	1570679382	Object Recognition Using Image Segmentation	Manish Chaturvedi

CT4: Cloud & Big Data Computing

Session Chair(s):

Kapil Sharma, Jaypee University of Information Technology, Waknaghat

Date: 8th November, 2020

Time: 11:00-12:00

Sr.No	EDAS ID	Paper Title	Presenter
1	1570666381	Industry4.0: A Study of India's Readiness as Preferred Investment Destination in Automotive & Auto Component Industry	Maninderjit Singh Khanna
2	1570677049	Advanced Image Segmentation Technique using improved K Means Clustering Algorithm with Pixel Potential	Pranab Sharma
3	1570679045	Resource and Task Clustering based Scheduling Algorithm for Workflow Applications in Cloud Computing Environment	Ashish Kumar Maurya
4	1570681335	Root Search Algorithm with Time Complexity Analysis	Not Presented
5	1570675535	Synchronization in Parallel Programming Models for Heterogeneous Many-Cores	Mohamed Nasser

