Report on

National Conference

on

Innovation in Engineering & Technology

(NCIET -2020)

16 to 18th March 2020

In association with
IEEE Student Chapter - AISSMSIOIT Pune
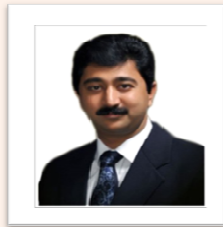
IEEE
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1

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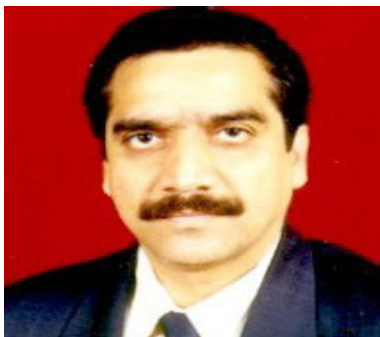Honorary Joint Secretary,,
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Dr. Sanjay Kurkute

Organizing Chair

NCIET-2020, Pune

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Dr. P. G. Mushril, First Year Engineering & Science Department, AISSMS IOIT, Pune

Track Coordinators -

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IT Engineering

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Instrumentation Engineering

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Electrical Engineering

Mrs. K.S. Gadgil   krutuja.gadgil@aissmsioit.org

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Ms. R. P. Saste (IT Engineering)

Ms. V. V. Kale (Instrumentation Engineering)

Mrs. Namrata Rao (Electrical Engineering)

Certificate Committee :

1. Mrs. D.S. Zingade, Computer Engineering.
2. Ms. Prajwal S. Gaikwad, Computer Engineering.

4

Aim of the Conference (NCIET – 2020):

To encourage the students / scholars/ Faculty members / Industry Experts in the preparation of better Technical Papers in the field of Engineering & Technology - Computer, Information Technology, Electrical, Electronics & Communication, Instrumentation, Interdisciplinary Engineering.

About the Conference:

NCIET- 2020 will feature invited talks, special sessions which will be offered by researchers and professionals working in academia, industry and research organizations. To imbibe research culture amongst under graduate students and to provide the students a platform to showcase their final year project work.

The conference has received **250 papers from all over India** and Reputed Colleges from Pune - PICT, VIT, VIIT, PCCOE, DYPCOE. The participation of all the presenters at NCIET 2020 has enrich their experience with good interactions with technical community.

This conference was benefited for the participants in achieving the goals of technical contributions at this global exposure.

Event Details:

Event Type	:	Research Paper Publications
Description	:	National Conference
Event Name	:	National Conference on Innovation in Engineering & Technology (NCIET -2020)
Venue	:	All India Shri Shivaji Memorial Society's Institute of Information Technology, Pune
Date	:	16th to 18th March 2020
Association	:	IEEE Student Chapter - AISSMSIOIT Pune

Call for the Papers:

Engineering & Technology Tracks:

> Computer Engineering
> Information Technology,
> Electrical Engineering
> Electronics & Communication Engineering
> Instrumentation Engineering
> Interdisciplinary Engineering

Conference Session Chair:

Sr.No.	Session chair name	Designation	Company/College Name
1.	Dr.D.G.Bhalke	Professor & Head ENTC	AISSMSCOE
2.	Mr. Nitin Dawande	Associate Professor	D.Y.Patil ,Ambi
3.	Dr.Pallavi S.Deshpande	Assistant Professor	SAE Kondhava,Pune
4.	Dr.Sandeep Shinde	HOD	VIT, Pune
5.	Dr. Mrs. Apate	Elect.	AISSMSCOE
6.	Dr. Kamthe	BOS(IT)	PVG,COET
7.	Dr.S.A.Mahajan	BOS(IT)	PVG,COET,Pune
8.	Mr. Pasad Mandrupkar	Team Lead	Tech Mahindra, Pune
9.	Dr.U.S.Thakar	Assistant Professor	PVG,COET,Pune

Conference Eminent Persons from Academia, Industry and Utility:

The Papers were presented in National Conference - NCIET 2020 and are published in

1. ISSN Proceeding Book of **International Engineering Research Journal (IERJ)** *www.ierjournal.org*

2. Good Quality papers are Published in

   Scopus Journal – Test Engineering and Measurement
   https://www.scimagojr.com/journalsearch.php?q=12997&tip=sid&clean=0

   Web of Science Indexed Journal - International Journal of Future Generation Communication and Networking
   http://sersc.org/journals/index.php/ijfgcn

Paper Presentations:

Poster Presentations:

Continuous Support and Advice:

Honorable Secretary AISSMS Shree Malojiraje Chhatrapati, Members National advisory committee all the reviewers, technical committee members, and session chairs. Shri Suresh Shindesaheb, Honorary Joint Secretary, Shri Ajay Patil, Treasurer, Advocate Bhagawanrao Salunkhe Chairman, Managing committee, AISSMS. General Chairs Dr. P. B. Mane, Principal AISSMSIOIT, all the Organizing Committee Members & IEEE Students Chapter – Volunteers, all the teaching & non teaching Faculty & Staff members of the institute.

Track wise Summary of Papers Received:

Paper ID	Paper Title	Tracks
2	Arduino based Battery Monitoring System	Computer Engineering
3	Music Genre Classification	Computer Engineering
4	Survey on anomaly based intrusion detection systems in IoT networks	Computer Engineering
5	Comparative Study of Different Machine Learning Techniques for Heart Disease Prediction	Computer Engineering
6	Design and development of portable navigation aid for disabled person using image processing	Computer Engineering
7	Entertainment suggestion for paralyzed and bed rest patient using EEG Signals	Computer Engineering
8	Review of Object Sorting Machine Using IOT	Computer Engineering
9	Automated Universal Utensil Washer	Computer Engineering

8

10	Urban Farming Using Supercaps	Computer Engineering
11	Data Logger For Automatic Weather System	Computer Engineering
13	Personality Traits Recognition for Interview Processes using Verbal and Nonverbal Cues: Literature Survey	Computer Engineering
14	A Capsule Based Method To Analyse Constituents Of Iot Traffic Data	Computer Engineering
15	Natural language to SQL query conversion	Computer Engineering
18	Multimodal Biometric Identification using Feature Fusion	Computer Engineering
19	Detection of Autism Spectrum Disorder (ASD) using Machine Learning Techniques: A Review	Computer Engineering
20	Motor Imagery based EEG Signal Classification using Electrode Optimization Methodology	Computer Engineering
21	Evaluation of ATM User Interfaces in India using Golden Rules of Interface Design	Computer Engineering
22	Quality Inspection of Tire using Deep Learning based Computer Vision	Computer Engineering
24	Automatic Detection of Helmet and License plate recognition using CNN & GAN	Computer Engineering
25	Smart Irrigation System	Computer Engineering
26	Design of single layer air core series reactor	Computer Engineering
27	Generation Of Electricity Using Foot Steps	Computer Engineering
28	Smart Residential Complex	Computer Engineering
29	ARC Series Rain Gauge Calibrator	Computer Engineering
30	Evaluation of Dense 3D Reconstruction from 2D Face Images in the wild : An Overview	Computer Engineering
32	Smart Gas Safety System With Automatic Knob	Computer Engineering
33	A Novel circuit for DC voltage transformation using transformer	Computer Engineering
34	Review of RFID technology in Inventory Management System	Computer Engineering
35	Sign to speech converter	Computer Engineering
36	Design and Development of Prototype For Milk Quality Analysis	Computer Engineering
37	Review On Structural Health Monitoring System For Bridges	Computer Engineering

38	IOT Based Circuit Breaker Monitoring And Control	Computer Engineering
39	Improvising Label Accuracy for Unsupervised Machine Learning Models	Computer Engineering
40	A survey on Information retrieval techniques and their performance measures	Computer Engineering
41	Automation Of Car Washing System Using PLC And SCADA	Computer Engineering
42	Image and Text Based Carbot	Computer Engineering
43	A Review: Advances in Heat sink Cooling Systems	Computer Engineering
44	Flexible Power Electronics Transformer	Computer Engineering
45	Intrusion Detection System using Soft Computing and Machine Learning Algorithm	Computer Engineering
46	A Sophisticated design of an UART for a µC based embedded system application	Computer Engineering
47	Simulation & design of a µC based system using VHDL / Modelsim codings with FPGA concepts	Computer Engineering
48	Harmonic Monitoring and Design of Passive Filter for an Educational Institute	Computer Engineering
49	Electronic measurement of different parameters using a user-friendly test apparatus	Computer Engineering
50	Control of stepper motor based on the high performance TMC-428 motion controller	Computer Engineering
51	Implementing a part-feeder system for a industrial robot doing some robotic manipulation	Computer Engineering
52	Internet of Things (IoT) based home automation development for human beings	Computer Engineering
53	Smart Farming Using Bidirectional Pumping	Computer Engineering
54	Chest Disease Detection from X-rays using CNN	Computer Engineering
55	Subjective Question Answering System with Automatic Result Generation using Natural Language Processing	Computer Engineering
56	Secured Identity System	Computer Engineering
57	Context Analysis Using Machine Learning Algorithms	Computer Engineering
58	Sentiment Analysis and Extracting User Opinions using Machine Learning	Computer Engineering
59	A Review Paper on Cloud Computing	Computer Engineering
60	Detection OF Fake Reviews Using Machine Learning Algorithms	Computer Engineering

61	Rakshak - The Electric Pole Climbing Robot	Computer Engineering
62	Micro controller based Power Factor Correction using Synchronous Motor	Computer Engineering
63	Deep Image Harmonization using Machine Learning	Computer Engineering
64	Tourism mobile app with sentiment classification using ML	Electrical
65	E-Certificate Generation using Blockchain for P2P Network	Electrical
66	IOT Based Fuel Dispensing	Electrical
67	Sign Language Recognition using Convolution Neural Networks	Electrical
68	Multipurpose Agricultural Vehicle	Electrical
69	A Survey On Photonics Radar Technology	Electrical
70	Railway track fault detection robot	Electrical
71	Industrial SOS Band	Electrical
72	Crowd Detection and Counting using Convolution Neural Network with Expression Detection.	Electrical
73	Automatic Rescue Device For Lift	Electrical
74	Solar Based Agro-Sprayer Robot for fertilizer	Electrical
75	Data transmission using crypto-steganography	Electrical
76	Generation of Melodious tunes using CNN and Genetic Algorithm	Electrical
77	Solar Based Advanced Agri-Robot	Electrical
78	Deep Image Harmonization using ML	Electrical
79	Iot Based Solar Panel Controlling And Monitoring	Electrical
80	Diabetes Detection and Prediction System using Machine Learning Algorithms	Electrical
81	Hybrid Cooler	Electrical
83	Pid Control And Electrical Parameter Data Logging For Dc Motor.	Electrical
85	Personal Assistant Using Raspberry Pi	Electrical
87	Online Subjective Test Result Analysis	Electrical
88	Marathi Handwritten Word Recognition Using Deep Learning	Electrical
89	Railway Track Crack Detection	Electrical
90	Animal Health Monitoring System Using Iot	Electrical
91	power theft monitoring on IOT platform using node MCU	Electrical
92	Resume parsing using NLP and Machine Learning Algorithms	Electrical
93	Vortex Bladeless Wind Turbine	Electrical
94	A Review Paper On Machine Learning Approach for Heart Disease Prediction: Current Status and Future Prospects	Electronics and Telecommunication
95	Automatic Grid Healing System using Minimum Spanning Tree Algorithm	Electronics and Telecommunication
96	surveillance unmanned ground vehicle	Electronics and Telecommunication
97	Automatic Detection of Epileptic Seizure	Electronics and

11

		Telecommunication
98	Laser Security with Video Surveillance	Electronics and Telecommunication
99	Face and number plate recognition for society security	Electronics and Telecommunication
100	Fire Extinguisher System	Electronics and Telecommunication
101	Employee Attenuation Rate Prediction	Electronics and Telecommunication
102	Review of Antenna Positioning System	Electronics and Telecommunication
104	Automatic Pesticides Spraying Robot For Crops	Electronics and Telecommunication
105	AI infused assistance for Agile user story slicing	Electronics and Telecommunication
106	A Smart Bio-Metric Voting System	Electronics and Telecommunication
107	Identity Based Authentication Of Health Records Using Blockchain	Electronics and Telecommunication
108	3D virtual Dressing Room Application	Electronics and Telecommunication
109	Portable device for Vitamin B12, Blood haemoglobin and Blood glucose detection	Electronics and Telecommunication
110	A Survey on Various Negotiation Techniques for Agent-Mediated Negotiation in e-Commerce	Electronics and Telecommunication
111	Eye Gesture Controlled Wheelchair using Sensor Goggles	Electronics and Telecommunication
112	Steganography and cryptography methods	Electronics and Telecommunication
113	Smart Classroom	Electronics and Telecommunicati

114	Model Predictive Control Technique for Test Response Prediction using reference signatures and Selective Test Pattern Generator in BIST design for reduction in Power Consumption	Electronics and Telecommunication
115	Performance Analysis of LoPy4 LoRaWAN in Outdoor and Indoor Environment	Electronics and Telecommunication
117	Image and Audio Transmission through Laser	Electronics and Telecommunication
120	Blind spot detection in Automobile	Electronics and Telecommunication
121	Design of MPPT Fuzzy logic control for solar system and PI control as a charge controller	Electronics and Telecommunication
122	Detection of Various Lung Diseases using Machine Learning	Electronics and Telecommunication
123	Disease prediction analysis using machine learning	Electronics and Telecommunication
124	Automatic grid healing system using minimum spanning tree algorithm	Electronics and Telecommunication
125	Development of Multi-Processor System on chip using Soft core: A Review	Electronics and Telecommunication
126	Smart Shopping Trolley	Electronics and Telecommunication
129	Automatic Recognition of Student Engagement using Deep Learning and Facial Expression	Electronics and Telecommunication
130	Video Analysis With Speech Modulation Using Neural Networks	Electronics and Telecommunication
132	Light Net with Brightness and Color Temperature Control using Android phone	Electronics and Telecommunication
134	Ingenious Watering System For Terrace Plantation	Electronics and Telecommunication
135	Identification Cold start Problem Start in Matrix Factorization Method for Online Web Recommendation Systems	Electronics and Telecommunication

136	Implementation On Recognize Obstructive Sleep Apnea By Using Region Growing Segmentation During Sleep	Electronics and Telecommunication
137	Automatic Early Leaf Spot Disease Segmentation on Cotton Plant Leaf	Electronics and Telecommunication
138	Road Sense Analysis Using Ultrasonic Sensor	Electronics and Telecommunication
139	Smart Water Management & Intelligent Farming	Electronics and Telecommunication
140	Development of Robotic Arm with 3 Degrees of Freedom for Interchanging of Tools in HMC Machine	Electronics and Telecommunication
141	Cross -Domain Relations using Disco-GAN: Combining Lifestyle And Fashion	Electronics and Telecommunication
142	Depression Detection Using AI through Visual and Text Expressions	Electronics and Telecommunication
143	Fruit quality measurement and sorting using android based robot	Electronics and Telecommunication
144	Industrial SOS Band	Electronics and Telecommunication
145	Enabling Blockchain Based Energy Transfer Using Ethereum Blockchain	Electronics and Telecommunication
146	Artificial Intelligence Based Recommendation System for Farmers	Electronics and Telecommunication
147	Tampered Video Detection	Electronics and Telecommunication
149	Fraud analytics System For Credit Card Using Machine Learning.	Electronics and Telecommunication
150	Smart E-Soldier For Military Application By using IOT	Electronics and Telecommunication
151	Dynamic Traffic Light Optimization and Control System	Electronics and Telecommunication
152	POLITICAL PREDICTION ANALYSIS USING TEXT MINING	Electronics and

		Telecommunication
153	High Dimensional Data Transmission using Hybrid Group Search Optimizer	Electronics and Telecommunication
154	Secured Electronic Voting Using Blockchain Technology	Electronics and Telecommunication
156	Detection of Lung Cancer Disease using Machine Learning	Electronics and Telecommunication
157	Early Flood Detection And Avoidance Using Machine Learning	Electronics and Telecommunication
158	Design, Installation & power quality analysis of Solar Panel for Rooftop Application	Electronics and Telecommunication
159	ERP Implementation: Issues & Challenges for Indian SME's	Electronics and Telecommunication
160	Data Monitoring Using IoT and Machine Leanring	Electronics and Telecommunication
161	Iot Based Automated Control System For Monitoring The Emission Levels Of The Individual Vehicles	Electronics and Telecommunication
162	Survey Paper on Assistive Device for Blind	Electronics and Telecommunication
163	AUTOMATIC AIR FRESHENER USING SENSORS	Electronics and Telecommunication
164	Home Automation System With Smart Analytics	Electronics and Telecommunication
165	Cloud based recommendations service healthcare.	Electronics and Telecommunication
166	Design And Development Of Smart Wind Generator	Electronics and Telecommunication
167	Online Crime reporting system	Electronics and Telecommunication
170	Advanced Proposal of Indian Cuisine Recipes Based on Ingredients	Electronics and Telecommunicati

15

171	Efficient Garbage Management System	Electronics and Telecommunication
173	Enriching Spam Account Detection in Twitter	Electronics and Telecommunication
174	Secret Messaging Based on QR Code by Implementation of Visual Secret Sharing Scheme	Electronics and Telecommunication
175	Vacuum Defense Shield	Electronics and Telecommunication
176	Smart Shopping Cart using RFID	Electronics and Telecommunication
177	Smart Shopping Cart	Electronics and Telecommunication
178	Sentiment Analysis and Prediction in Social Media	Electronics and Telecommunication
179	Smart Irrigation in Agriculture Sector by Using PLC	Electronics and Telecommunication
180	Smart Shopping Cart Using RFID	Electronics and Telecommunication
181	Wavelet Neural Network based moving object tracking for Wireless Sensor Network	Electronics and Telecommunication
182	Braille Embosser	Electronics and Telecommunication
183	Descriptive Answer Assessment System Using NLP	Electronics and Telecommunication
184	Fish Pond Management Using IoT	Information Technology
185	Electric Bike Design With Anti-theft System Using Fingerprint Recognition	Information Technology
186	IoT based Antenna Positioning System	Information Technology
187	Vehicular Traffic Signal Control for Ambulance and Patient Health Monitoring Over Internet of Things (IOT)	Information Technology
188	Smart Automated Wheelchair for Visually Impaired & Physically Disabled	Information

16

		Technology
218	Spectrum Selection Methods for Throughput Enhancement and QoS in Cognitive Radio Networks	Information Technology
219	Weed Removing Robot	Information Technology
220	Total Home Security	Information Technology
221	Logic Based Rule Generation from a Trained Artificial Neural Network for Input Data Reconstruction	Information Technology
222	Hydrogen Fuel Cell: A Best Energy Alternative For 21st Century	Instrumentation
223	Smart Chair for Heart Disease Prediction	Instrumentation
225	PLC Based Welding Transformer	Instrumentation
226	Card-Less ATM Using Biometrics	Instrumentation
228	Dual axis automatic solar tracking system	Instrumentation
229	A Machine learning Powered Cyber Security System	Instrumentation
230	Payment For Paper Id 145, "Enabling Blockchain Based Energy Transfer Using Ethereum Blockchain"	Instrumentation
231	Feature Representation for Audio Classification using CNN Model	Instrumentation
232	Smart Electricity consumption using LoRa Module	Instrumentation
234	Environment monitoring system using low cost sensors	Instrumentation
236	Design and fabricate 3D printer for PCB engraving and prototype design.	Instrumentation
237	Hand Gestured Controlled Car (Prototype)	Instrumentation
239	ZigBee Based Weather Monitoring System for Air pollution and Rainfall monitoring and establishing interrelation	Multi disciplinary
240	Camera Ready Paper : Paper ID 145	Multi disciplinary
241	BIG DATA & HEALTHCARE SYSTEM:A SURVEY	Multi disciplinary
242	Validation of ECG Compression method through Classification Accuracy	Multi disciplinary
243	Compression of ECG Signals using Entropy Based Threshold in Wavelet Subbands	Multi disciplinary
246	PAPER ID 145 TRANSACTION ID 005711112816	Multi disciplinary
247	Mobile Signal Jammer	Multi disciplinary
248	HUMAN STRESS DETECTION USING EEG SIGNAL	Multi disciplinary
249	FASAL DISEASE DETECTION AND CLASSIFICATION USING DEEP LEARNING TECHNIQUES	Multi disciplinary
250	Receipt	Multi disciplinary
251	Blockchain Based Soyabean Traceability In Agriculture Supply Chain	Multi disciplinary
252	Air Quality Prediction and Monitoring	Multi disciplinary
253	Smart Tank Water Monitoring System using IOT	
254	Self Balancing Robot with Line following Capability	