

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE



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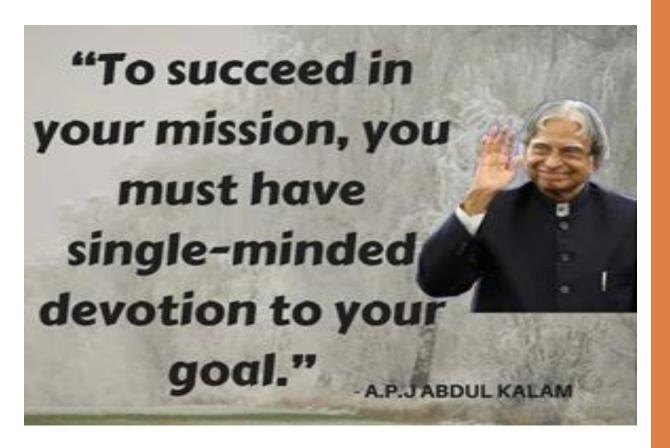
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EDITORIAL BOARD:

- Dr. Akhilesh Tiwari, Prof. & Head (Chairman)
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- Prof. Amit Kumar Manjhvar
- Aishwarya
- Pooja Agrawal

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PUBLICATIONS IN JOURNALS

❖ International Journals:

- Deepak Sharma, Vivek Kirar, Prof. Khushboo Agarwal "Automated Attendance Management System Through Face Recognition" International Research Journal of Engineering and Technology (IRJET) Volume: 07 Issue: 06, June 2020.
- Prof. Parul Saxena, Prof. R. S. Jadon, "Characterizing Anomalous Behavior of Moving Objects using Optical Flow Feature Extraction in Crowded Environment", IJET, Vol. 12, Issue 2, April 2020. DOI : 10.21817/ijet/2020/v12i2/201202005
- 3. Prof. Valiure Rahaman, Prof. Sanjiv Sharma, Book Chapter: "Reading an extremist mind through literary language: approaching cognitive literary hermeneutics to R.N. Tagore's play The Post Office for neuro-computational predictions", Book Title: Cognitive Informatics, Computer Modelling, and Cognitive Science Volume 2: Application to Neural Engineering, Robotics, and STEM, published in Elsvier, 2020 Edited book by GR Sinha & Jasjit S Suri. Pages 197-210, ISBN: 978-0-12-819445-4.
- 4. Soniya Mudgal, Prof. Mahesh Parmar, Mining of the Correlations for Fatal

- Road Accident using Graph-based Fuzzified FP-Growth Algorithm. International Journal of Engineering and Advanced Technology (IJEAT), June 2020, Volume-9 Issue-5, PP. 279-283, ISSN: 2249 8958, DOI: 10.35940/ijeat.E9526.069520. (ELSEVIER Scopus Index) (Impact Factor 6.02).
- 5. Soniya Mudgal, Mahesh Parmar, A Comprehensive Review on Road Traffic Fatal Accidents in India. International Journal of Computer Sciences and Engineering (IJCSE), April 2020, Vol.8, Issue.4 PP. 141-144, E-ISSN: 2347-2693, DOI: https://doi.org/10.26438/ijcse/v8i4.141144. (Impact Factor 3.022).
- 6. Rahul Goyal, Amit Kumar Manjhvar, Vikas Sejwar, "Credit card fraud detection in data mining using XGBoost classifier" International journal of Recent Technology & Engineering, Volume 9, Page No. 630-608, May 2020.
- 7. Vanshita Pansari, Amit Kumar Manjhvar "Fake comments detection with sentiment anatomy using iterative sequential minimal optimization algorithm" International journal of Innovative Technology & Exploring Engineering (IJITEE) Volume 9, Page No. 41-46, June 2020.
- 8. Dabariya C., Singh R.K. (2020) Development of Framework for Greenness Identification. In: Pandit M., Srivastava L., Venkata Rao R., Bansal J. (eds) Intelligent Computing Applications for Sustainable Real-World Systems. ICSISCET 2019. Proceedings in Adaptation, Learning and Optimization, vol 13. Springer, Cham.
- 9. Rajeev Kumar Singh et. al. (2020) Modified Differential Evolution Algorithm Based Neural Network for Nonlinear Discrete Time System, DOI: 10.4018/978-1-7998-0414-7.ch089, (IGI Global).
- 10. Pathak, Y., Shukla, P. K., Tiwari, A., Stalin, S., & Singh, S. (2020). Deep Transfer Learning Based Classification Model for COVID-19 Disease. Innovation and Research in Bio Medical engineering (IRBM). (ELSEVIER) https://doi.org/10.1016/j.irbm.2020.05.003.
- Singh, S., Verma, S. K., & Tiwari, A. (2020). A novel approach for finding crucial node using ELECTRE method. International Journal of Modern Physics B, 34(9). https://doi.org/10.1142/S0217979220500769.
- Pandit, S., Shukla, P. K., Tiwari, A., Shukla, P. K., Maheshwari, M., &Dubey, R. (2020). Review of video compression techniques based on fractal transform function and swarm intelligence. International Journal of Modern Physics B. World Scientific Publishing Co. Pvt. Ltd. https://doi.org/10.1142/S0217979220500617.

13. Singh S., Verma S. K. & Tiwari A. (2020). A novel method for destabilization of terrorist network. Modern Physics Letters B. World Scientific Publishing Co. Pvt. Ltd. https://doi.org/10.1142/S021798492050298X

Conference Publication:

- Om Kumar Soni, Jamvant Singh Kumre, "A Survey on Underwater Images Enhancement Techniques", 2020 IEEE 9th International Conference on Communication Systems and Network Technologies (CSNT), 12 April 2020.
- Ruchi Jaiswal and Manish Dixit, "Comparative analysis of Human Face Recognition by Traditional Methods and Deep Learning in Real-time Environment" IEEE International Conference CSNT 2020, online, 10-12 April 2020.
- 3. Mohd Aijaj Khan, Manish Dixit," Demystifying and Anticipating Graduate School Admissions using Machine Learning Algorithms" IEEE International Conference CSNT 2020, online, 10-12 April 2020.
- 4. Anurag Goswami and Manish Dixit, "An Analysis of Image Segmentation Methods for Brain Tumor Detection on MRI Images" IEEE International Conference CSNT 2020, online, 10-12 April 2020.

ACTIVITIES ORGANIZED

1. ONLINE NATIONAL WORKSHOP ORGANIZED:

Title of the workshop: Data Sciences: Techniques and Tools

Duration of the workshop: 20 – 21st June, 2020

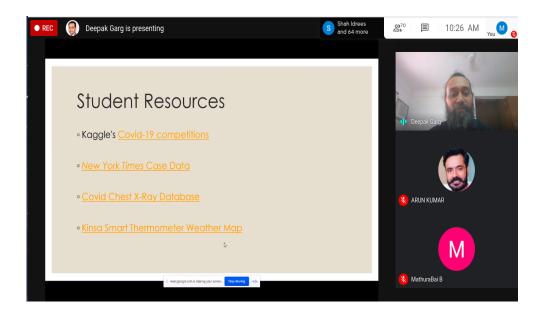
Brief description of the workshop:

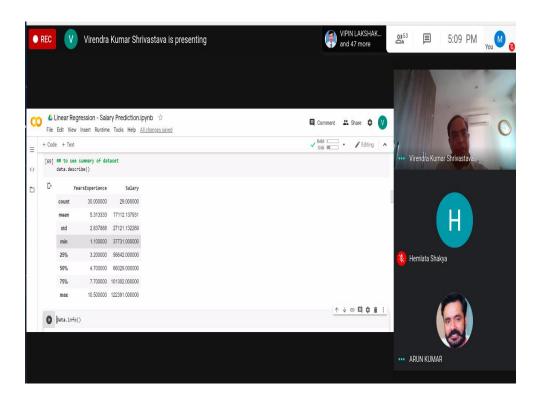
In today's world, data plays a vital role in any organization or field, helping it to make critical decisions depending on the patterns and facts deduced from the data. Data science is a concept to bring together ideas, data examination, Machine Learning, and their related strategies to comprehend and dissect genuine phenomena with data. Data science is an extension of various data analysis fields such as data mining, statistics, predictive analysis and many

more. Data Science is a huge field that uses a lot of methods and concepts which belongs to other fields like information science, statistics, mathematics, and computer science. The applications of data sciences include: Fraud & Risk Detection, Healthcare, Internet Search, Targeted Advertising, Website Recommendations, Advanced Image Recognition, Speech Recognition, Airline Route Planning, Gaming, Augmented Reality and many more. In view of all these applications and benefits of data science, we propose to organize an online national workshop on "Data Sciences: Techniques and Tools", which will focus on highlighting various concepts and techniques used in data sciences for the desired analysis of data and use of available tools for the implementation of these methods. The workshop will benefit faculty, research scholars as well as students because these days this field is one of the hot research topics and is also used in corporate sectors for business analysis and other applications. Since the field is the amalgamation of various other fields, it will bring various experts from multiple fields together for knowledge sharing and will encourage interdisciplinary research too.

Name and affiliation of experts:

- Dr. Dinesh K. Vishwakarma, Associate Professor, Department of Information Technology, Delhi Technological University, Delhi.
- **Dr. Mukesh Saraswat**, Associate Professor, Jaypee Institute of Information Technology, Noida.
- Dr. Vivek Kapoor, Assistant Professor, Department of IT, IET, Devi Ahilya University, Indore.
- Dr. Vinay Kumar Srivastava, Professor of Electronics and Communication Engineering, MNNIT, Allahabad.
- Dr. Ramjeevan Singh Thakur, Professor, Department of Computer Applications, MANIT, Bhopal.
- **Dr. Deepak Garg**, Professor and Head-Computer Science and Engineering Department, School of Engineering & Applied Sciences, Bennett University, Noida.
- Expected participants: Faculty, Students, Research Scholars.
- Number of participants: 105



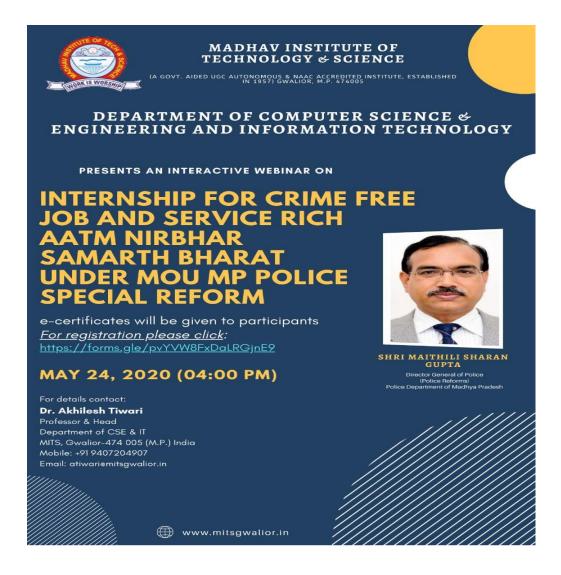


2. ONLINE NATIONAL CONFERENCE ORGANIZED:

Online National Conference on Advances in Information and Communication Technology (NCAICT-2020) Under TEQIP Phase-III June 17th -18th, 2020.

The conference aims to explore various areas of Computer Science & Information Technology and provide a common platform to researchers, professionals and scientists to share their research experiences and views. Thrust Areas (but not limited to):

- Data Mining and its Applications
- Image Processing
- Networking
- Information Security Practices and Issues
- Multimedia Computing
- Grid Computing
- Cloud Computing
- ❖ Internet of Things (IoT)
- Mobile Computing
- Data Compression
- Social Networking
- Distributed Systems
- Wireless Networks
- ❖ 5 G and Beyond Wireless Sensor Networks, etc.
- **3. WEBINAR ORGANIZED:** CSE & IT Department Organized an Interactive Webinar on "Internship for Crime Free Job and Service Rich Aatm Nirbhar Samarth Bharat under MOU MP Police Special Reform, dated 24 May 2020".



FACULTY ACCOLADES

- Prof. Jamvant Singh Kumare, Organizing Committee Member of "Online National Conference on Advances in Information and Communication Technology (NCAICT-2020)" held on 17-18 June 2020.
- Prof. Amit Kumar Manjhvar, Organizing Committee Member of "Online National Conference on Advances in Information and Communication Technology (NCAICT-2020)" held on 17-18 June 2020.
- **Prof. Jamvant Singh Kumare**, Committee Member of Study Activities related information desired by HRM regarding COVID-19 on 9th May 2020.
- Prof. Rajeev Kumar Singh Expert Talk on FDP "Machine Learning Algorithms, Applications & Advantages" organized by Kamala Institute of

Technology and Science, Singapur on 29/05/2020.

- **Prof. Neha Bhardwaj** Worked as Organizing Secretary in two days national conference on AICT, held on 17-18 June 2020.
- **Prof. Neha Bhardwaj**, Coordinator of one day Hackathon (Idea cum Product Development Design Competition as the prerequisite of SIH 2020) on 31st Jan 2020, organized in the CSE & IT department MITS.
- **Prof. Neha Bhardwaj,** Coordinator, one day workshop on innovative and interactive Teaching Learning Practices on 15th Feb 2020, organized in the CSE & IT department MITS.
- **Prof. Neha Bhardwaj** Coordinator, Two days national workshop on "Recent Trends in AI, Deep Learning and its applications, organized in the CSE & IT department MITS, during 28-29 September 2019.

FACULTY OUTREACH (TRAINING PROGRAM/FDP ATTENDED)

1. FDP ATTENDED:

- Dr. R. K. Gupta attended One week FDP online on "Python 3.4.3", from 19th May2020 - 23rd May 2020.
- ❖ Dr. R. K. Gupta attended One week FDP online on "Machine and Deep Learning applications in Engineering & Science (MLDLAES 2020)", from 16-20 May 2020.
- ❖ Dr. R. K. Gupta attended One week FDP online on "Maximal Utilization of ICT Tools for Online Teaching-Learning Process", from 09-13 May, 2020.
- ❖ Dr. Manish Dixit attended10 days FDP online on "FDP on Deep Learning and Its application" from 04-13 May 2020 organized by National level organized by IIT Roorkee.
- ❖ Dr. Manish Dixit attended one week FDP online on" FDP on Deep Learning and Its application", from 18-22 May 2020.
- ❖ Dr. Manish Dixit attended one week FDP online on" FDP on Introduction

- to AI and Machine Learning" from 25-30May 2020.
- ❖ Dr. Akhilesh Tiwari participated and successfully completed "Faculty Awareness Program on NAAC Accreditation" Organized by RD's Shri Chhatrapati Shivajiraje College of Engineering, Dhangawadi, Pune, conducted online during the period of May 2020.
- ❖ Khushboo Agarwal attended one week online FDP on MATLAB Applications in Engineering and Science, under TEQIP III organized by Government College of Engineering, Karad during 27th April 1st May, 2020.
- Khushboo Agarwal attended one week online FDP on Machine Learning and Deep Learning Applications in Engineering & Science, under TEQIP III organized by Government College of Engineering, Karad during 16th April 20th May, 2020
- ❖ Khushboo Agarwal attended one week online FDP on "The Growing Role of IOT in Latest Technological Trends" organized by SOIT,RGPV Bhopal during 22nd Jun − 26th Jun, 2020.
- ❖ Jaimala Jha attended one week online FDP on MATLAB Applications in Engineering and Science, under TEQIP – III organized by Government College of Engineering, Karad during 27th April – 1st May, 2020.
- ❖ Jaimala Jha attended one week online FDP on Machine Learning and Deep Learning Applications in Engineering & Science, under TEQIP – III organized by Government College of Engineering, Karad during 16th April – 20th May,2020.
- ❖ Dr. Sanjiv Sharma attended one week online Faculty Enablement Program on "Infosys Campus Connect Program- Python using INFYTQ Platform" conducted by Infosys at from 22nd 29th June 2020
- ❖ Dr. Sanjiv Sharma attended One Week Online National Level Faculty Development Programme entitled "Python 3.4.3" organized by Department of Computer Engineering, Government Polytechnic, Awsari (kh) in association with Spoken Tutorial, IIT Bombay, funded by National Mission on Education through ICT, MHRD, Government of India from 19th May 2020 to 23rd May 2020.
- ❖ Dr. Sanjiv Sharma attended One Week Online Faculty Development Program (FDP) On "Machine and Deep Learning applications in Engineering

- & Science (MLDLAES 2020)" organized by Government engineering college Karad,16-20th May 2020.
- ❖ Dr. Sanjiv Sharma attended One Week Online Faculty Development Program(FDP) On "Maximal Utilization of ICT Tools for Online Teaching-Learning Process" (Theme: Facing COVID-19 Challenge as Teachers), Organized by Department of Applied Science and Humanities, Rajkiya Engineering College, Ambedkar Nagar in Association with J. C. Bose University of Science & Technology, YMCA, Faridabad, Haryana 09-13 May, 2020.
- ❖ Dr. Sanjiv Sharma attended AICTE Training And Learning (ATAL) Academy Online FDP on "Data Sciences" at Indian Institute of Information Technology (IIIT Nagpur) from 18-04-2020 to 22-04-2020.
- ❖ Prof. Parul Saxena attended One Day Workshop on Functional Programming Using Python Programming under International Confederation of Assessment, Evaluation& Accreditation Council, USA, on 06th June, 2020.
- ❖ Prof. Parul Saxena Attended One Week Online FDP on Data Sciences, under AICTE Training and Learning (ATAL) Academy organized by IIIT Nagpur, during 25th −29th May, 2020.
- ❖ Prof. Parul Saxena Attended One Week Online National Level FDP on Python, Conducted by IIT, Bombay Under National Mission on Education through ICT(MHRD) organized by Department of Computer Engineering, Government Polytechnic, Awasari during 19th − 23rd May, 2020.
- ❖ Prof. Parul Saxena Attended Two Day National Workshop on Time Series Analysis &Distributed Computing, under Industry Institute Collaboration Association during 14th − 15th May, 2020.
- ❖ Prof. Parul Saxena Attended One Week online FDP on "Maximum Utilization of ICT Tools for Online Teaching-Learning Process" in association with J. C. Bose University of Science and Technology, YMCA, Faridabad, Haryana, organized by Department of Applied Science and Humanities, Rajkiya Engineering College, Ambedkar Nagar during 9th 13th May, 2020.
- ❖ Prof. Parul Saxena Attended One Week online FDP on Matlab Applications in Engineering and Science, under TEQIP III organized by Civil Engineering Department, Government College of Engineering, Karad during 27th April 1stMay, 2020

- ❖ Prof. Mahesh Parmar Attended One week Skill Enhancement Program on "Deep Learning", Organized by Forsk Coding School, Jaipur from 09th − 13th June 2020.
- ❖ Prof. Mahesh Parmar Attended One week Faculty Development Program on "Python and Emerging Trends in Machine Learning", Organized by Forsk Coding School, Jaipur from 02-06 June 2020.
- ❖ Prof. Mahesh Parmar Attended One week AICTE Training And Learning (ATAL)Academy Online FDP on "Internet of Things (IoT)", Organized by Indian Institute of Information Technology(IIIT Nagpur) from 25-04-2020 to 29-04-2020.
- ❖ Prof. Mahesh Parmar Attended One Week online Faculty Development Program under SAGE SUMMER SCHOOL on "Machine Learning and Applications", Organized by Department of Computer Science & Engineering, SIRT, Bhopal from 18-23 May 2020.
- ❖ Prof. Mahesh Parmar Attended One Week Faculty Development Program on "Online Teaching Etiquette and Best Practices" Organized by Santhiram Engineering College, Nandyal in collaboration with Talentio Solutions India Pvt. Ltd., Hyderabad from 10-15 May 2020.
- ❖ Prof. Mahesh Parmar Attended One Day Faculty Development Program on "AWS Cloud Computing Services", Organized by Department of Computer Science and Engineering Joginpally B.R Engineering College on 03rd June 2020.
- ❖ Prof. Mahesh Parmar Attended One Day online workshop on "Data Visualization Part-1", Organized by National Institute for Industrial training under Govt. of West Bengalon 22nd of April 2020.
- Prof. Amit Kumar Manjhvar attended Five day Workshop AICTE training &Learning (ATAL) academy online FDP on Artificial Intelligence from 30/04/2020 to 04/05/2020.
- ❖ Prof. Chayan Agrawal attended one week Online Faculty Awareness Program on "Outcome Based Education & NBA Accreditation" Organized by Department of Mechanical Engineering of Rajgad Dnyanpeeth's Shri Chhatrapati Shivajiraje College Of Engineering, Dhangawadi, Pune, Maharashtra, during the period of12-17May 2020.
- ❖ Prof. Chayan Agrawal attended 3 Days Online Faculty Development Program

- on "Recurrent Convolution Neural Network An Approach To Deep Learning" Organized by Department of Computer Science and Engineering of Kallam Haranadhareddy Institute of Technology, Guntur, Andhra Pradesh in collaboration with Computer Society of India during the period of 14-16 May 2020.
- ❖ Prof. Chayan Agrawal attended 3 Days Online Faculty Development Program on "Cloud Data Infrastructure" Organized by Department of Computer Science and Engineering of Kallam Haranadha reddy Institute of Technology, Guntur, Andhra Pradesh in collaboration with Computer Society of India during the period of 18-20 May 2020.
- ❖ Prof. Chayan Agrawal attended one week Faculty Development Program on "Artificial intelligence and Machine Learning Techniques" Organized by RGPV under TEQIP-III in association with Department of Computer Science and Engineering of Gyan Ganga Institute of Technology and Science, Jabalpur, M.P. during the period of 21-25 May 2020.
- ❖ Prof. Chayan Agrawal attended 3 Days Online Faculty Development Program on "Blockchain Technology" Organized by Department of Computer Science and Engineering of Kallam Haranadhareddy Institute of Technology, Guntur, Andhra Pradesh in collaboration with Computer Society of India during the period of 26-28May 2020.
- ❖ Prof. Chayan Agrawal attended 2 Days Online Workshop on "Machine Learning and Data Science" Organized by Department of Computer Science and Engineering of Oriental Institute of Science and Technology, Bhopal, M.P. during the period of 5-6June 2020.
- ❖ Prof. Chayan Agrawal attended 5 Days Online Faculty Development Program on "Artificial Intelligence and Data Science" Organized by Department of Information Technology of Oriental Institute of Science and Technology, Bhopal, M.P. during the period of 10-14 June 2020.
- ❖ Prof. Chayan Agrawal attended 2 Days Online Workshop on "Data Science: Techniques and Tools" Organized by Department of Computer Science and Engineering &Information Technology of Madhav Institute of Science and Technology, Gwalior, M.P. under TEQIP-III during the period of 20-21 June 2020.
- ❖ Prof. Punit Kumar Johari, attended One week AICTE Training and

- Learning(ATAL)Academy FDP on "Data Sciences" organized by Indian Institute of Information Technology, Vadodara, from 25-05-2020 to 29-05-2020.
- ❖ Prof. Punit Kumar Johari, attended Five Days STTP on "Internet of things and Its application in Industry" organized by RATI Navi Mumbai and B&R automation Pvt. Ltd. Pune, from 08-06-2020 to 12-06-2020.
- ❖ Prof. Rajeev Kumar Singh attended FDP on Machine Learning and Deep Learning Applications in Engineering & Science, 16 May 2020 to 20 May 2020.
- Prof. Rajeev Kumar Singh attended FDP on Machine Learning Algorithms, Applications & Advantages, 25 May 2020 30 May 2020.
- ❖ Prof. Punit Kumar Johari, attended Five days Short Term training program on "Recent Trends in Data Science and Information Security" organized by Ramrao Adik Institute of Technology, Narul, from 22-06-2020 to 26-06-2020.
- ❖ Prof. Jamvant Singh Kumare attended One Week "Short Term Training Programme" on Network Security", organized by NITTR Kolkata during 27-April to 01 May 2020.
- ❖ Prof. Jamvant Singh Kumare participated one Week online "Faculty Development Programme" on "Block Chain", organized by NIT Nagaland during 22-26 June2020.
- ❖ Dr. Anshu Chaturvedi, attended One week AICTE Training and Learning (ATAL)Academy FDP on "Internet of things", from 07-05-2020 to 11-05-2020.
- ❖ Dr. Anshu Chaturvedi, attended One week NPTEL FDP on" Cloud Computing", from September-November 2020.
- ❖ Prof. Neha Bhardwaj Attended Five days online FDP on Internet of Things and its application in Industry from 8-12 June 2020 jointly organized by department of Instrumentation Engineering, Ramarao Adik Institute of Technology, Navi Mumbai and B&R Automation
- ❖ Prof. Neha Bhardwaj Attended Five days online STTP on Recent Trends in data Science and Information Security from 22-2 June 2020 organized by department of Computer Engineering, Ramarao Adik Institute of Technology.

ONLINE WEBINAR/NATIONAL SEMINAR/COURSERA (ATTENDED BY FACULTY)

- ❖ Dr. Akhilesh Tiwari Participated in a National webinar on "Mental Health Awareness For COVID-19" Organized by Dumka Engineering College (Estd. By Govt. of Jharkhand & Run by Techno India under PPP) (TEQIP Phase III sponsored) through video conferencing on May 16, 2020.
- ❖ Dr. Akhilesh Tiwari attended Leadership Talk With Dr. Nilesh N Oak, Expert (Indian Civilization & History) organized by MHRD's Innovation Cell, held on 30th May 2020.
- ❖ Dr. Akhilesh Tiwari participated in the online "Novel COVID-19 Pandemic General Awareness Quiz" conducted by the Department of School of Management Studies (SMS) of Lakireddy Bali Reddy College of Engineering, Mylavaram on 13 May 2020.
- ❖ Dr. Akhilesh Tiwari Participated in the online Quiz on "COVID-19 General Awareness" conducted by St. Mary's Integrated Campus Hyderabad.
- Dr. Akhilesh Tiwari Successfully attended Leadership Talk With Dr. Pramod Chaudhari, Founder, Chairman, Praj Industries Limited and Dr. Abhay Jere, Chief Innovation Officer MHRD Innovation Cell, Saturday, 16th May 2020 organized by MHRD's Innovation Cell.
- ❖ Dr. Akhilesh Tiwari Participation in the Webinar on "Machine Learning", by Ms. Anuradha Srinivasraghavan , on 19th May 2020 , organized by the Department of Information Technology, Shri G. S. Institute of Technology &Science, Indore (M.P.) in association with WILEY India Pvt. Ltd.
- ❖ Dr. Akhilesh Tiwari Attended a webinar on "How to Access Taylor & Francis Journals" conducted by Taylor & Francis Group on 19th May 2020.
- Dr. Akhilesh Tiwari Participated and Successfully completed an online noncredit course on "Pattern Discovery in Data Mining" authorized by University of Illinois at Urbana-Champaign and offered through Coursera conducted by Jiawei

- Han Abel Bliss, Professor, Department of Computer Science
- ❖ Prof. Mahesh Parmar attended One day webinar on "INTERNSHIP FOR CRIME FREEJOB AND SERVICE RICH AATM NIRBHAR SAMARTH BHARAT" Organized by Department of CSE & IT, MITS, Gwalior on May 24th, 2020.
- Prof. Mahesh Parmar attended One day webinar on "Full Stack Development Vs Traditional Development Platforms", Organized by Vedanta College on 17/05/2020.
- Prof. Mahesh Parmar attended One day webinar on "Development of Micro-Sensors and their Application using Artificial Intelligence" Organized by Amity School of Engineering and Technology (ASET), Amity university, Gwalior on 8th May 2020.
- ❖ Prof. Mahesh Parmar attended One day National Seminar on "Digital Transformation & Contribution of Engineers for Society" organized by IEEE and IETE at MITS, Gwalior on 16th September 2018.
- ❖ Prof. Mahesh Parmar attended One day National Summit/Seminar on "Digital Judiciary-Building Smart Courts" organized by Madhav Institute of Technology and Science, Gwalior under the Computer Society of India on 15th April 2018.
- ❖ Prof. Parul Saxena attended National Webinar on Developing a Career in Internet of Things organized by Department of Computer Science & Engineering, SKITM, Indore on 25th May 2020.
- ❖ Prof. Punit Kumar Johari attended 3 days short term training programme on "LaTeX for everyone" organized by Department of Engineering and Sciences, RAIT, Navi Mumbai, from 18-20 June 2020.
- ❖ Prof. Punit Kumar Johari attended Webinar on "Mathematica& Applications of Mathematics" organized by Department of Applied Sciences, Mathematics and Humanities, Pillai College of Engineering, New Pavel, Maharashtra from 27-29 Jume 2020.
- ❖ Prof. Jamvant Singh Kumare attended One day National workshop on "Data Science/ Machine learning", organized by IETA Kolkata, WB on 25.04.2020.
- ❖ Prof. Jamvant Singh Kumare participated in the One day Webinar on "AI AND ITS APPLICATIONS", organized by SGSITS Indore, M.P. on 03.04.2020.
- ❖ Prof. Jamvant Singh Kumare attended One day National workshop on "Data

- Science: Techniques & Tools", organized by Dept. of CSE & IT, MITS Gwalior on 20-21 June 2020.
- ❖ Prof. Neha Bhardwaj Attended one day webinar on Cyber Security & Employment Opportunity on 19th May 2020, conducted by ISEA.
- ❖ Prof. Neha Bhardwaj Attended one day webinar on Cyber Crimes against Children and women on 20th May 2020, conducted by ISEA.
- ❖ Prof. Neha Bhardwaj Attended webinar on Publishing Ethics: The role of Publishers, journals researchers and Institutions on 25 June 2020, by Maria Kowalczuk, organized by Springer Nature.
- Prof. Mahesh Parmar Successfully completed "Introduction to Data Analytics for Business" course authorized by University of Colorado Boulder and offered through Coursera.

CLUB ACTIVITY

❖ MITS Dance Club organized an online dance competition during lockdown from 5th May 2020 to 30th May 2020 under guidance of Prof. Parul Saxena (faculty coordinator) and organizers: Samiksha Sharma (President, dance club) and Himanshi Agrawal (Member, dance club). It was conducted on our instagram page @danceclubmits and was open for all in which 25 students participated all around India. Winners were awarded with cash prizes.





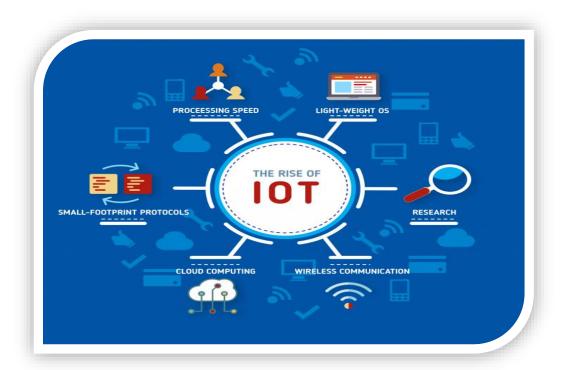




LATEST COMPUTER TEHNOLOGIES

• INTERNET OF THINGS (IOT):

The term Internet of Things generally refers to scenarios where network connectivity and computing capability extends to objects, sensors and everyday items not normally consider-ed computers, allowing these devices to generate, exchange and consume data with minimal human intervention. Many "things" are now being built with WiFi connectivity, meaning they can be connected to the Internet and to each other. Hence, the Internet of Things, or IoT. The Internet of Things is the future and has already enabled devices, home appliances, cars, and much more to be connected to and exchange data over the Internet. The Internet of Things is happening now. It promises to offer a revolutionary, fully connected "smart" world as there relationships between objects, their environment, and people become more tightly intertwineed. Yet the issues and challenges associated with IoT need to be considered and addressed in order for the potential benefits for individuals, society, and the economy to be realized.



How Is IoT Changing the World?

IoT is reinventing the automobile by enabling connected cars. With IoT, car owners

can operate theircars remotely—by, for example, preheating the car before the driver gets in itor by remotely summoning a car by phone. Given IoT's ability to enable device-to-device communication, cars will even be able to book their own service appointments when warranted. The connect-ed car allows car manufacturers or dealers to turn the car ownership model on its head.

Previously, manufacturers have had an arms-length relationship with individual buyers (or none at all). Essentially, the manufacturer's relationship with the car ended once it was sentto the dealer. With connected cars, automobile makersor dealers can have a continuous relationship with their customers. Instead of selling cars, they can charge drivers usage fees, offering a "transportation-as-a-service" using autonomous cars. IoT allows manufacturers to upgrade their cars continuously with new software, a sea-change difference from the traditional model of car ownership in which vehicles immediately depreciate in performance and value.

• COGNITIVE CLOUD COMPUTING:

Cognitive Cloud is an extended ecosystem of traditional Cloud and Cognitive Computing. It's due to this, you can create Cognitive Computing applications and bring to the masses through cloud deployments. Cognitive computing is considered as the next big evolution in the IT industry.

It converses in human language and helps experts in better decision making by understanding the complexities of Big Data. Its market size is expected to generate revenue of \$13.8 billion by **2020** and is one of the top 10 trending technologies to consider this year.

Big brands such as IBM, Google, Microsoft, Cisco have already started implementing this next-gen tech to gear up for the upcoming market. It stands as extending the ecosystem that will make it possible to create and bring Cognitive Computing applications to the masses. Startup Cognitive Scale is providing an incarnation of the concept via its portable, open-standards based Cognitive Cloud platform that aims to accelerate value from a company's existing investments in Big Data. It takes a technology-independent approach: Cognitive applications built on its platform are able to run on any public Cloud infrastructure, whether Amazon Web Services, Google Cloud, or IBM Bluemix, and also are available in an on-premise version based on OpenStack open source software.

