



DEPARTMENT OF INFORMATION TECHNOLOGY 2020-2021

GLIMPSE OF IT



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A "GLIMPSE OF IT" NEWSLETTER :

The department newsletter "Glimpse of IT" is published once a year. It primarily focuses on the department's important events, student and faculty publications, accomplishments, campus placement, industry interactions, visits, and details about higher education.

Editorial Incharge:
Dr. K. K. Sharma
Ms. Puja Gupta
Mr. Upendra Singh
Mrs. Sonu Airen
Mrs. Megha Kuliha

Headlines

Best Placement

Name: Shruti Jain

Company Name: Microsoft

Profile: Software Engineer

Package: 48 lac per annum



AIR 2 in GATE

Kishan Mittal secured an

All India Rank 2 in GATE CSE 2021



Placements

Top Placement Companies



Topper of the Year

Darshani Ramrao Barasker

Topper B.E. Information Technology
Percentage - 87 %



Gold Medal Achiever



Shruti Jain

Current Job:
Software Engineer at Microsoft



Darshani Ramrao Barasker

Current Job:
Software Engineer at LTI

Best Project

Exam Proctoring System to enhance online learning

Project By: Shruti Jain and Suraj Patil

Guided By: Mr. Manjeet Soni and Ms. Puja Gupta

- Due to covid outbreak online learning modes became really important for students. In order to enhance the exam and evaluation procedure students of 20-21 batch developed an automated exam proctoring system. It requires test taker to have a webcam and internet connectivity. The system analyses head pose, eye gazes, face count and mouth movement to judge whether the test taker is cheating or not. The system displayed good results with a precision of 0.95.

Home security system using IoT and Face recognition

Project By: Ritesh Baghole

Guided By: Ms. Puja Gupta

- Integrated liveness detection, IoT, and face recognition modules that provide automatic door unlock feature
- Developed features such as alert messages and emails, and a module that seeks homeowner's permission through mail to open the door automatically when a guest is not identified as a registered family member



Smart Chair

Project By: Komal Singh, Ayushi Singh, Mahima Komayu

Guided By: Ms. Puja Gupta



Smart Portable Attendance system

Project By: Sheersh Bajpai, Pranjal Vyas and Mayank Bhadrasen

Guided By: Ms. Puja Gupta

- System is based on the Raspberry -Pi, python programming language, laser scanning of barcodes, and management of data. The system is made by using raspberry-Pi 4 attached with an LCD screen for display purpose, a barcode scanner to capture the data.
- After successfully scanning data, the output generated by scanner is stored in a CSV(Comma Seperated Value) file which is then exported to main server for data validation and this data can be transferred to the administrator computer through USB until then it will be stored in the micro SD card.





A system and method for detecting malicious activities in computing

Worked By: Ashish Kumar Jain, Manjeet Kumar Soni, Chandra Prakash Patidar, Mukul Shukla, Upendra Singh
Year of application: 20 April 2020



Packet delay and Bandwidth consideration for real-time and non-real-time applications for QoS Oriented Network Selection.

IEEE 802. 16e WiMAX
Worked By: Chandra Prakash Singar
Year of application: 4 November 2020

An artificial intelligence based system for medicine dispensing

Worked By: Chandra Prakash Singar
Year of application: 13 January 2021

An intelligent system for detect COVID-19 protocol

Published Date: 15 Jan 2021
Worked by: Ms. Puja Gupta, Dr. Sunita Varma, Ms. Upendra Singh, Mr. Mukul Shukla



Audio and text based news broadcasting system for blind or partially blind users with audio modulation through Artificial Intelligence

Worked By: Neeraj Rathore
published on: 26th Feb 2021

Study on evolutionary computing based web service selection Techniques

By Purohit, L. , and Kumar , S., 2021 ,
Artificial Intelligence Review, 54 (2) , pp. 1117-1170.

The Cloud : Features, Challenges and Scope.

By Chaturvedi, A. , and Gupta , P., 2021 ,
International Journal of Progressive Research in Science and
Engineering, 2(8), pp. 466-471.

Dynamic Web service composition using AI planning technique: Case study on Blackbox planner

Purohit, L., Chouhan, S.S. and Jain, A., 2020. Dynamic Web service composition
using AI planning technique (pp. 183-195). Springer, Singapore.

Mitigate wormhole attack and blackhole attack using elliptic curve cryptography in MANET

M Shukla, BK Joshi, U Singh - Wireless Personal Communications, 2021 - Springer

Role of data hiding techniques for detection of virtual disks in cloud environment

Khan, Y. and Varma, S.

A Novel Security Technique Based on Controlled Pixel Based Encryption of Image Blocks for Sharing a Secret Image

N Rathore, Dhiraj Pandey, Rumi Iqbal Doewes and Abhishek Bhatt Wireless Personal Communication (Q-3), Springer Publication-New-York (USA),

Image Forgery Detection Using Singular Value Decomposition With Some Attacks

N Rathore, N Jain and P.K. Shukla, Umashankar Rawat, Rachna Dubey National Academy Science Letters (Q-3), Springer Publication

A Hybrid Extreme Learning Machine With Fuzzy Sigmoid Kernel Based Efficient Image Forgery Detection For Both Copy Move And Spliced Image

N Jain, N Rathore and A Mishra Cluster Computing Journal (Q-3), Springer Publication-US

An efficient network coded routing protocol for delay tolerant network

Mukesh Sakle International Conference on Social Networking and Computational Intelligence

Development and design strategies of evidence collection framework in cloud environment

Khan, Y. and Varma, S. In Social Networking and Computational Intelligence (pp. 27-37). Springer, Singapore. - 2021

A Novel of VANETs utilizing fog(FCC) and edge computing (ECC) paradigm Time Line Approach

Poorva Shukla,Sunita Varma,Ravindra Patel

An Intelligent Blockchain and Software-Defined Networking-Based Evidence Collection Architecture for Cloud Environment

Khan, Y. and Verma, S., 2021. Scientific Programming, 2021.

A framework for a Secure IoT based EHR system using Blockchain Technology

Kuliha, M. and Varma, S., 2021. Design Engineering

Stock Market Prediction Using Hybrid Approach

Neeraj Arya International Conference on Innovative Data Communication Technologies and Application

Comparative Study on Face Detection by GPU, CPU and OpenCV

Upendra Singh Second International Conference on Computer Networks and Communication Technologies

Key Generation Using Featured Based Finite Element Method

Chandra Prakash S. International Journal on Emerging Technologies

Mysteries of Earth's Moon through Indian Lunar Mission

Expert: Dr. Pradeep Chauhan (Director Indian Institute of Remote Sensing, Dehradun)



Fighting the Lockdown Blues

Expert: Dr. Pradeep Chauhan (Director Indian Institute of Remote Sensing, Dehradun)



Blockchain

Expert: Mr. Ambadas Chaudary, Mr. Sham M R, Mr Arshad Ariff (Industry Expert)



The Growing Role of IOT on Covid-19 & Health care

Expert: Mr. Ambadas Chaudary, Mr. Sham M R, Mr Arshad Ariff (Industry Expert)



Speech Processing

Expert: Dr. Saila Dinkar Apte
(Proprietor Anubhooti Solution,
Pune)



Exponential Technologies in Education

Expert: Prof. PK Chande (Ex. Director
MANIT Bhopal)



Machine Learning

Expert:
Dr. Anuradha Srinivasaraghava (Machine
Learning Expert and Academician)

मरीज पर नजर रखने और संक्रमित ढूंढने में मददगार मशीन लर्निंग

प्रसन्नोएस आईटीएस में हुआ वेबिनार

डॉ. अनुराधा श्रीनिवासराघवा

मशीन लर्निंग के माध्यम से कोरोना-19 से संक्रमित लोगों को अलग करने में मदद करने के लिए मरीज पर नजर रखने और संक्रमित ढूंढने में मददगार मशीन लर्निंग का उपयोग किया जा सकता है। डॉ. अनुराधा श्रीनिवासराघवा ने इस वेबिनार में मरीज पर नजर रखने और संक्रमित ढूंढने में मददगार मशीन लर्निंग के उपयोग के बारे में बताया। वेबिनार में डॉ. अनुराधा श्रीनिवासराघवा ने मरीज पर नजर रखने और संक्रमित ढूंढने में मददगार मशीन लर्निंग के उपयोग के बारे में बताया। वेबिनार में डॉ. अनुराधा श्रीनिवासराघवा ने मरीज पर नजर रखने और संक्रमित ढूंढने में मददगार मशीन लर्निंग के उपयोग के बारे में बताया।

Cyber Security During COVID 19

Expert: Dr. Varun Kapoor (IPS, MP)

लॉकडाउन के बीच साइबर क्राइम से लोम हो रहे आर्थिक और मानसिक रूप से परेशान-डॉ. कपूर

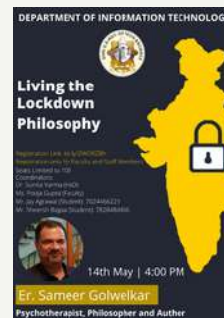
प्रसन्नोएस आईटीएस में साइबर सुरक्षा पर वेबिनार का आयोजन हुआ

डॉ. वरुण कापूर

लॉकडाउन के बीच साइबर क्राइम से लोम हो रहे आर्थिक और मानसिक रूप से परेशान-डॉ. कपूर ने इस वेबिनार में साइबर सुरक्षा के बारे में बताया। वेबिनार में डॉ. वरुण कापूर ने साइबर सुरक्षा के बारे में बताया। वेबिनार में डॉ. वरुण कापूर ने साइबर सुरक्षा के बारे में बताया। वेबिनार में डॉ. वरुण कापूर ने साइबर सुरक्षा के बारे में बताया। वेबिनार में डॉ. वरुण कापूर ने साइबर सुरक्षा के बारे में बताया।

Living the Lockdown Philosophy

Expert: Er. Sameer Golwelkar
(Psychotherapist, Philosopher
and Author)



Machine Vision and Digital Twins using Embedded AI and Tiny ML

Expert: Prof. Rajkamal (Embient Academ)

Impact of COVID 19 on Human Life

Expert: Dr. Sanjay Khator (Senior consultant and HOD Pulmonary Medicine, Tata Main Hospital Jamshedpur)

SHRI G.S. INSTITUTE OF TECHNOLOGY AND SCIENCE, INDORE M.P.

DEPARTMENT OF INFORMATION TECHNOLOGY

Proudly Present a Webinar on
Machine Vision and Digital Twins
using Embedded AI and Tiny ML

Registration open for Faculty, Staff and Students
Registration Link: bit.ly/mvdt
Limited Seats, E-Certificates for Participants
For queries contact the numbers provided
19th June | 11:30 AM

Dr. Raj Kamal
Embient Academician and Professor

Prof. Ravish Vasava
Director & Patron

Prof. Sanjay Varma
HOD & Convener

Faculty Coordinators

Student Coordinators

Ms. Priya Gupta Dr. Neeraj Mathore Ms. Ujjwala Singh
Mr. Shreshth Bajpai: 762680835 Mr. Anant Mishra: 889502488
Ms. Muskan Baghel: 839976762

DEPARTMENT OF INFORMATION TECHNOLOGY, S.G.S.I.T.S., INDORE

WEBINAR ON IMPACT OF COVID-19 ON HUMAN LIFE

Registration for Faculty, Staff and Student.

On Zoom App
May 03 | Time | 11 - 12 AM
Register on: <https://bit.ly/2u5u5P2>

Register soon LIMITED ENTRIES AND registration fee...
E-Certificates will be provided to registered participants.

Co-ordinators
Dr. Neeraj Mathore (Faculty): +91 9902082417
Mr. Jay Agrawal (Student): +91 7924488221

Dr. Sanjay Khator
Senior Consultant and Head of Department
Pulmonary Medicine
Tata Main Hospital
Jamshedpur (Jharkhand)

Vision of the Department

To create IT technocrats equipped with skills, ethics, and social values for developing globalized and technological solutions for betterment of society through transformative education.

Mission of the Department

- To Enable students become technocrats who can cater the growing manpower need of the industry for economic development.
- To build a centre of excellence on frontier areas of Information Technology and related domain.
- To impart quality and value based education in Information Technology to enable students solve real world problems with an inclination towards betterment of society.

A Note from the Head of Department

"Recently, we have witnessed so many natural calamities and alarming changes in the global climate, including rapidly increasing global warming. These are challenging the further survival of this beautiful earth we live in. We should take into consideration how much we have been able to use research to serve the lowest and most vulnerable strata of society. In our approach to sustainable development, we should not forget that it is by strengthening the people at the base of the pyramid that the entire edifice of society becomes healthy and strong."



- Dr. Sunita Varma

Head of Department, Information Technology

कोरोना संक्रमण के समय में भी विद्यार्थियों की पढ़ाई का नहीं होने दिया नुकसान

इंदौर (नईदुनिया प्रतिनिधि)। हर दिन के नुकसान से बचाने के लिए सरकार ने कोरोना संक्रमण के समय में भी विद्यार्थियों की पढ़ाई का नहीं होने दिया नुकसान।

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टेक्नोलॉजी • फल-सब्जी के साथ मोबाइल, पर्स आदि को वायरस से बचाना आसान संस्थानों ने तैयार किए सस्ते यूवी उपकरण

यूवी सैनिटाइजर

यूवी सैनिटाइजर को वायरस से बचाने के लिए फल-सब्जी के साथ मोबाइल, पर्स आदि को वायरस से बचाना आसान संस्थानों ने तैयार किए सस्ते यूवी उपकरण।

यूवी सैनिटाइजर को वायरस से बचाने के लिए फल-सब्जी के साथ मोबाइल, पर्स आदि को वायरस से बचाना आसान संस्थानों ने तैयार किए सस्ते यूवी उपकरण।

मास्क नहीं पहना तो सीसीटीवी करेगा संस्थान को अलर्ट

गर्जद विश्वकर्मा • इंदौर (नईदुनिया)

इस तरह काम करती है तकनीक

मशीन लीनिंग तकनीक से डेटा का किया जाता है एनालिसिस

- 1- व्यक्ति के कार्डरबल पर मीजुड रहने, मुवमेंट करने से सहित अन्य जानकारी का मशीन से प्रालन हो सकता है।
- 2- इसी तरह ड्रमैज प्रीसेसिंग तकनीक का उपयोग फेस डिटेक्शन के लिए किया जाता है।
- 3- इसमें संस्थान के व्यक्ति की सवित्र जानकारी फीड करने के बाद तकनीक से व्यक्ति को जुड़ी जानकारी सॉफ्टवेयर भेजता है।

उन्हें चिन्हित कर लिया जाए। इसके बाद ऑफिस या संस्थान के प्रबंधन सिस्टम तक यह सूचना भेजी जायेगी। सीसीटीवी कैमरा व्यक्तियों के बीच की दूरी पता करेगा और फेस डिटेक्शन तकनीक का उपयोग कर यह पता लगाया जाएगा कि कितने लोग मास्क का उपयोग कर रहे हैं। जानकारी को डीवीआर जैसे हार्ड डिस्क में सेव करने के साथ सिस्टम प्रबंधन तक मैसेज भी पहुंचायेगा।

संदिग्ध के पॉजिटिव होने के दौरान होने वाले बदलाव पर भी रिसर्च एसजीएसआईटीएस के निदेशक प्रो. राकेश सक्सेना ने बताया कि इसके अलावा हम व्यक्ति की आदतों पर आधारित रिसर्च से कोविड-19 के संदिग्ध की पहचान करने पर काम कर रहे हैं। इसमें संदिग्ध मरीज के चेहरे, आवाज

सामान्य प्रकार की यह रिसर्च इस समय कोविड-19 के दौर में काफी मददगार हो सकती है। मानव रहित तकनीक से मास्क नहीं लगाने वाली और सुरक्षित शारीरिक दूरी का उपयोग नहीं करने वाली का पता लगाया जा सकता है। इसके अलावा हम सिटी स्कैन से कोविड-19 की जांच रिपोर्ट तैयार करने पर भी काम करना चाहते हैं। सामान्य मरीज और कोविड मरीजों के सिटी स्कैन टेस्ट डाटा को एनालाइज कर बहुत सटीक रिपोर्ट तैयार की जा सकती है। इसके लिए हम प्रशासन से कोविड-19 के डेटा उपलब्ध कराने की मंग कर रहे हैं।

- राकेश सक्सेना, निदेशक, एसजीएसआईटीएस

पार्किंसन बीमारी बिना दवा वाइब्रेटिंग ग्लब्स से होगी कंट्रोल

एसजीएसआईटीएस में आयोजित हुई ऑनलाइन दिवसीय कार्यशाला

दरभंगपुर • इंदौर

पार्किंसन बीमारी से ग्रस्त लोगों को बिना दवा के ही वाइब्रेटिंग ग्लब्स से बीमारी को कंट्रोल करने में मदद मिलेगी।

एसजीएसआईटीएस में आयोजित हुई ऑनलाइन दिवसीय कार्यशाला में डॉ. राकेश सक्सेना ने बताया कि वाइब्रेटिंग ग्लब्स का उपयोग कर पार्किंसन बीमारी को कंट्रोल करने में मदद मिलेगी।

Designed by-

- Roli Jain
- Yashraj Solanki
- Shreyansh Shukla
- Aryan Tiwari
- Sarthak Modhe
- Anusha Pahariya

Editorial Board:



Dr. K. K. SHARMA
(Associate Professor)



Ms. Puja Gupta
(Assistant Professor)



Mr. Upendra Singh
(Assistant Professor)

#INCLUDE

SESSION 2020 - 21

Departmental #include club:

The Department establishes a Technical club "# Include" directed by final year, third-year students and affiliated with second-year students in order to foster technical knowledge, teamwork, and personal growth. This student society is led by the Head of Department as President and backed by faculty members as Vice-Presidents, as well as a team of students serving as General Secretary, Secretary, and Joint Secretary. The President appoints the Vice President, General Secretary, and Secretary, while the remaining positions are filled through appropriate auditions with the approval of the previous year's President, Vice-President, and General Secretary before the start of each academic session.

Recruitment of Batch 2023

The aim of this process was to screen the students through this three level recruitment process and filter the best ones in the IT'23 batch, who would best suit the club.



Session on Git/Github

The motive of the session was to give students an insight about the technology Git and GitHub. Also, to acknowledge them with various hackathons and various technical competitions.



Ask me anything session

The main motive of the session was to help students by clearing their doubts regarding careers. Through this session, students got a chance of asking their queries to an experienced software engineer, Mr. Pawan Pillai. He not only answered their questions but also guided them towards the path of success.



#INCLUDE

SESSION 2020 - 21

Exploring Blockchain

The main motive of this session was to introduce viewers to the concept of blockchain.

Students got an introductory session about blockchain, everyone got their doubts cleared by the speaker Mr. Pranav Maheshwari. He answered and took the session with a great energy and involvement of every listener.



Code Mining

On 21st February 2021, official technical club of S.G.S.I.T.S #include organized event named Code Mining for all students of IT 2024 batch.

The event started with the introduction of the club by the co-leads RishiChawla, Akash Goyal and Sakshi Maheshwari.





- Kashish Chugh
- Nishant Singh Rai
- Kashish Purswani
- Shuja Qureshi
- Aman Arya

**Designed and edited by-
Team #include**



**Dr. Lalit Purohit
- Incharge, #include**



**Mrs. Megha Kuliha
- Incharge, #include**