



DEPARTMENT OF INFORMATION TECHNOLOGY 2021-2022

# 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

# Topper of the Year



**Ayushi Maheshwari**  
**IV Year**

Topper B.E. Information Technology  
CGPA : 9.16



**Shobhit Pal**  
**III Year**

Topper B.E. Information Technology  
CGPA : 8.75



**Aryan Gupta**  
**II Year**

Topper B.E. Information Technology  
CGPA : 8.84

## Placements

### Top Placement Companies



## Block chain based vaccine distribution system



We proposed an blockchain-based approach to enable the distribution and delivery process of COVID-19 vaccines in a manner that is decentralized, traceable, transparent, reliable, auditable, secure, and trustworthy. We developed smart contracts to automate the process of recording and logging events related to the COVID-19 vaccines distribution and delivery, thereby ensuring data provenance. We presented architecture details, system components, and algorithms along with their implementation. Addition we presented a web application which will be used to interact with the blockchain network.

Guided By: Dr. Sunita Varma, Ms. Puja Gupta

## Sign Language Interpretation System



Convolutional Neural Networks are finding application in many domains of technology. Using CNN, image classifiers can be trained to recognize and correctly identify images into sub categories. The project uses CNN based model to try and recognize the English alphabet associated with the hand sign displayed in the image, based on the American Sign Language Standard. The model developed was able to achieve 97% accuracy on the testing dataset.

Guided By: Ms. Megha Kuliha

## Virtual Assistant & Hand Gesture recognition



This Project help us to operate our PC without touching anything. We used gesture Interpreter to understand sign language. We were able to control the display screen with hand gestures like controlling media player for play/pause , scrolling through any

document pages and many more things. Operating PC will become smooth and fast as giving voice commands and making gesture is faster as compared to using keyboard and mouse

Guided By: Upendra Singh, Ms. Puja Gupta

## AI Trading bot

Our Trading Setup not only provides a simple trading method, but it also provides Traders with an advantage based on their Trading Style. People who are just starting out in their trading careers may readily learn the Setups' and apply them to the market. The Doji Setup is the foundation of all the Setups, and it is simple to spot and trade in Doji. The EMA, or exponential moving average, tells us about the market's trend. The EMA reveals the trend of the Shorter Time Frame, however the 200-Day EMA helps to comprehend the movement of the Market in the Bigger Picture. Guided By: Ms. Megha Kuliha, Ms. Puja Gupta

## Application for Crime Prediction based on AI

A Interface which will help to solve above problem by taking text input in the form of FIR, from which keywords will be detected to predict the IPC's using Machine Learning and User interface using Web Technology. Which will lead to Quick and Accurate decision making.

Guided By: Dr. Lalit Purohit, Mukesh Sakle

## Best Placement



**Akshay Jain**



**Krishnam Rath**



**Neeraj Kumar Jaiswal**



**Tejas Tiwari**

Company Name: Amazon Development Centre Pvt Ltd  
Role: Software Engineer  
Package: 44 Lpa [Lakh per annum]



**Yash Tayal**

## International Patents

### **Artificial Intelligence And Machine Learning Based Method For Recognizing Abnormal Activity In Vehicle And Simultaneously Detecting And Preventing Heart Abnormalities Of Vehicle Drivers**

Worked By: Chandra Prakash Singar

### **AUTOMATIC GUIDANCE SYSTEM FOR BLIND COMMUNITY**

Worked By: Upendra Singh, Puja Gupta

### **SMART UAV FOR CROP ESTIMATION, EVOLUTION AND RECOMMENDATIONS**

Worked By: Upendra Singh, Puja Gupta

## Patents

### **A SMART ROAD ASSET MANAGEMENT SYSTEM AND METHOD THEREOF**

Worked By: Upendra Singh

### **A SYSTEM FOR AUTOMATIC SEGREGATION OF WASTE MATERIALS**

Worked By: Upendra Singh, Puja Gupta

### **AN INTELLIGENT SYSTEM TO DETECT COVID-19 PROTOCOLS**

Worked By: Prof. Sunita Verma, Mukul Shukla , Puja Gupta, Upendra Singh



## Research Papers

### Enhancing the Route Optimization Using Hybrid MAF Optimization Algorithm for the Internet of Vehicle

By : Sunita Varma

### A novel algorithm for mask detection and recognizing actions of human

Expert Systems with Applications (ELSEVIER)

By : Puja Gupta, Sunita Varma

### Adaptive Load Balancing Scheme for Software-Defined Networks Using Fuzzy Logic Based Dynamic Clustering

Lectures Notes on Data Engineering and Communication Technologies

By : Sunita Varma

### Energy efficient architecture for mitigating the hot – spot problem in wireless sensor networks

Journal of Ambient Intelligence and Humanized Computing

By : Sunita Varma

## Nayika Award

On International Women's Day ( 8 March 2022), Mrs. Puja Gupta awarded prestigious "Nayika award" for Automatic Mask Detection and Sanitizing Machines and Related Patents from Collector Manish Singh, Sansad Shanker Lalwani, and IPS officers Pratibha Pal. The Nayika award is granted to women who have made significant contributions to our country and society



## Achievement of students in RGPV Indore Nodal Inter-Collegiate Tournament



**SGSITS Won the Indore nodal inter college chess men's competition organized by Swami Vivekanand Institute, Indore.**



**Winner , Internodal RGPV STATE LEVEL Football Tournament , Represented Indore Nodal Football Team , Went undefeated. At - IES , Bhopal in January 2022**



**Runner Up , Intercollegiate NODAL LEVEL Football Tournament , Represented SGSITS Football Team.**

**At - BM College , Indore in December 2021**

# 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



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## 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)

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# #INCLUDE

SESSION 2021 - 22

## 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.

## Mern Stack Bootcamp

The event was conducted offline at LT-302. It gave interested participants an idea about development through MongoDB, React JS, ExpressJS and NodeJS and also included a hands on experience for them through a notes app project. The session covered everything from frontend to backend specifics of the application.



## TECH-tonic

The event was conducted offline at seminar hall at 5th floor of ATC building. It was mainly conducted for all freshers of 2025 batch to guide them about the programming domains they can explore to improve their skills. It was designed in a way that the doubts and problems that they usually face in learning about DSA, Competitive programming and Web Development are addressed in an ordered manner.





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

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



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



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