Gyan Ganga Institute of Technology & Sciences

Glimpse e-Newsletter

Department of Computer Science & Engineering

Program Educative Objectives

- **PEO 1**: Graduates will pursue their careers in global domain for software development with proficiency in analysis, design, coding, testing deployment, maintenance of system and application software.

- **PEO 2**: Graduates will show professionalism with effective communication skills, leadership qualities, teamwork, ethical, economic, cultural, environmental issues related to multidisciplinary projects for resolving social issues.

- **PEO 3**: Graduates will enhance knowledge and skills through higher studies and lifelong learning new computing technologies for attaining professional excellence and research.

- **PEO 4**: Graduates will drive scientific and societal advancement through technological innovation and entrepreneurship.

Highlights

- **Smart India Hackathon 2020**
- **Shaping Your B.Tech & Spandan Event**
- **Fresher's Got Talent 2020**
- **Up & Coming Technologies- Courses**

Dr Ashok Verma
Professor & HOD

Word from the HOD

Dear Alumni & Friends,

It is a matter of immense pride for us that we have such quality students as part of our department. Our students have proved that even the Covid-19 pandemic & lockdown cannot stop them from growing. This issue includes the prestigious projects of the students for Smart India Hackathon 2020, an event organized by MHRD, i4c and Persistent Systems of National Acclaim. We also conducted a Motivational Webinar to motivate our students in the hard times of lockdown. The college further organized the Freshers Got Talent Event for 1st-year students of batch 2020-2024. Here they showcased their talents in singing, dancing, musical instruments, etc. Due to the Pandemic all these events were conducted virtually. We welcome any sugestion and feedback.

Vision:

- Imparting the best technical and professional education to the students of the Institute.
- Conceiving world – class Education, Ethics and Employability for students in global perspective.

Mission:

- Imparting intensive teaching and training through latest technology
- Motivating the teachers for higher learning and innovative research activities with social services.
- Generating maximum opportunities for placement of students in National, Multi-National companies and nurturing entrepreneurship quality.
- Producing highly intellectual citizens through technical education to constitute an elegant society and meeting social challenges.

Shaping your B.Tech and Spandan Seminar Event

The event **"Shaping Your B.Tech & Spandan"**, which comprised of two educational & motivational sessions for two different student groups was hosted by the Department of Computer Science and Information Technology and was organized by Team Indigo GGITS. The guest speaker for the event was **Mr. Aman Dhattarwal** who is a popular personality among the Indian youth. Dated **22nd February 2020**, the 1 st seminar for high school students was attended by more than 100 students and the 2 nd seminar for college students was attended by more than 500 undergrads. Also, we observed the gracious presence of Honorable Directors of the Gyan Ganga Group, Respected Principals of GGITS and GGCT and Respected Head of Departments. Completely organized and managed by the students of the first year, the event was a grand success and the seminars proved to be very beneficial and helpful for the students.

About the Speaker

Aman Dhattarwal is the founder of **Apni Kaksha**, which is an online platform for learning Computer Sciences and Programming. He is the coordinator for Jaipur Foot USA and a Star Educator for IIT-JEE at Unacademy. Aman Dhattarwal is a B.Tech. graduate from NSUT Delhi in Information Technology. He is an alumni of Delhi Public School R.K. Puram.

He is an immensely popular educator, a youth icon and a career counselor, very famous and known personality among JEE aspirants, high-school students and mainly college students.

Up & Coming Technologies-Courses

Artificial Intelligence & Machine Learning

Artificial Intelligence is the ability of a computer to perform tasks on its own accord. Users need to actually "teach" the computer programs the various possibilities after examining and comparing which, it takes decisions and performs the assignments. In recent times, AI machine learning has been beneficial and crucial.

AI has been revolutionary for working in places with extreme conditions. Due to these reasons, there is a high scope in this field which will only increase in the near future.

Internet of Things & Cybersecurity

Internet of Things (IoT) is the networking of physical objects or devices for multi-functionality and ease of usage. Most of the devices used these days rely heavily on the concept of IoT, but they also risk the privacy and digital security of the user in many cases.

It is where Cyber Security comes into the picture. Due to the covid pandemic and lockdown, most of the transactions around the world were digital, and this trend will only increase. Hence, Cybersecurity and IoT are growing and essential fields today.
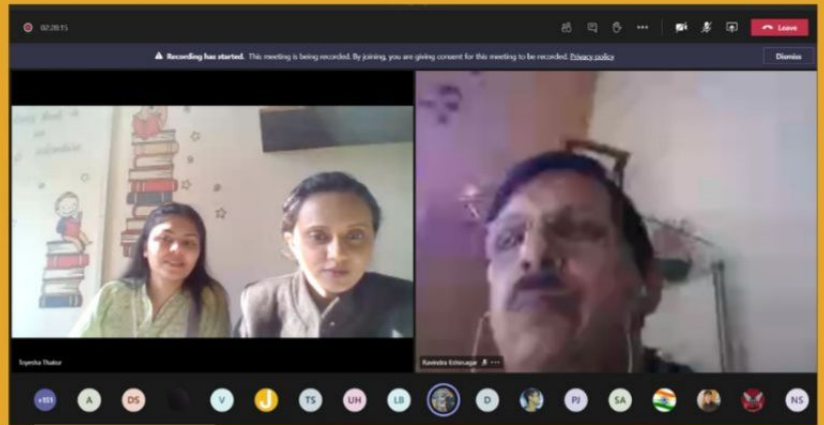
Data Science

Data Science is the study of vast amounts of data & taking suitable business decisions after analysing the data with modern tools & techniques for identifying underlying patterns and meaningful observations. Recently there has been a spike in the need for Data Scientists. For this reason, the study of data science has great potential and will grow definitely in India as well. Data Science deals with complex AI algorithms and mathematics, so a student has to be sound on paper and the digital ground.

Fresher's Got Talent 2020

The event - "Fresher's Got Talent 2020" organised by GGITS, took place on **16th December 2020**. The event took place virtually and in the gracious presence of Shree Ravindra V Kshirsagar, Principal GGITS and Engineer D C Jain Sir, Chairman & Patron Gyan Ganga Group. The event started after encouraging and blessing words from Kshirsagar Sir and Jain Sir. In the tough times of the Covid-19 Pandemic, this event greatly motivated the freshers. Various competitions took place and gave the students a chance to showcase their talents, like **Singing**, **Dancing**, **Instrument Playing** and **Rapping**. But apart from these **Beat Boxing**, a rather contemporary vocal art style was also presented for the first time.

Singing Competition

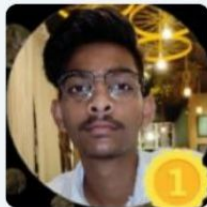| Hariom Dhondi	Soumya Chaurasiya	Priyanka Jaiswal	Tsering Dawa	Rishi Keshkumar
GGITS CSE	GGITS CSE	GGITS CSE	GGITS CSE	GGITS ME

Dancing Competition

Aman Shrivastava	Shaily Kaw	Aditi Sahu	Jaspreet
GGITS CSE (IOT)	GGITS CSE (DS)	GGCT IT	GGITS CSE (DS)

Instrument Playing Competition

Tejvheer	Jagriti Sah	Disha Soni
GGITS CSE (DS)	GGITS CSE	GGITS EE

Beat Boxing Competition

Sagar Sapre
GGITS CSE (DS)

Rap Singing Competition

Varis Rajak
GGCT CSE

Yash Richhariya
GGITS CSE (AIML)

SMART INDIA HACKATHON 2020

SMART INDIA HACKATHON 2020

The Honorable Prime Minister of India, Shree Narendra Modi started the Smart India Hackathon in 2017, intending to provide students from all around the country with a platform to solve the various problems faced daily throughout the country. In this way, the students can develop a problem-solving mindset & keep up with the ever-evolving tech world.

In SIH 2020, a total of 344 Problem statements were registered from different organizations/ministries like State Government, Central Ministry, Industry Personnel and Student innovation.

Amidst the lockdown due to Covid-19 Pandemic, the students worked hard, and out of these 344 problem statements, four problem statements were nominated from the Institute. All four teams were eligible to participate in the Virtual Online SIH 2020 platform schedule from 1st August to 3rd August 2020.

A team from our institute cleared the final Round of SIH 2020 and has won a Cash Prize of Rs 1 Lakh. In the near future, if the team plans to convert their ideas into a startup, then they would get a fund of Rs 50 lakhs from Govt of India.

Winners - Team Ctrl_alt_defeat

Abhishek Raghuvanshi
Deepika Lalwani
Ekansh Verma
Rohit Verma
Samiksha Wadhera
Vidushi Choubey

PROBLEM STATEMENT :

Flood is a major environmental problem in India as it has destructive or damaging effects on life and property. There is a serious need of detailed research in the development of regional or national flood damage functions for pre-disaster flood damage estimation property. Risk assessment is important in making decisions, policies and managing floods. The objective of this study is to review and synthesize concepts and techniques.

SOLUTION:

The main concept of the project was based on GIS based flood monitoring and assessment. The objective of the project was to develop a real-time flood monitoring and early warning system. The ultimate aim is to build a water level detection using ultrasonic sensor to monitor the rivers and develop a web and SMS application as an early warning system that provides essential information to the concern authorities. Team has used a buzzer which alarms the authority and residence whenever the water level starts rising so that they can start evacuation process . They added the feature of prediction using satellite data.