

**I.T.S ENGINEERING COLLEGE  
GREATER NOIDA  
(A NAAC Accredited Engineering College)**



**Work Report**

**Name of the Event:** Two Days Hands on Workshop on “Industrial to Robotics” by e-Yantra IIT Bombay.

**Date of the Event:** 16<sup>th</sup> & 17<sup>th</sup> June 2023.

**Hosted by:** e-Yantra (COE), ITS Engineering College

**Speaker:** Mr. Kalind Karia & Mr. Jaison Jose, Senior Project Engineer, e-Yantra, IIT Bombay

**Venue of the event:** Naidu Hall & ITB Lab

**Coordinator of the Event:** Ms. Pragati Tripathi, Assistant Professor & Coordinator e-Yantra Lab

**Participants:** Faculty members from different engineering colleges

**No. of Participants:**

- Faculty Members: 20
- Students: 13

**Objectives of the Workshop:**

- Impart theoretical and programming knowledge to faculty members through workshops
- Provide hands on training to teachers through regional e-Yantra Robotics Teacher Competition
- Help colleges set up their own Robotics labs.

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Director  
ITS Engineering College  
Greater Noida

## TARGET AUDIENCE

The workshop was aimed at those who want to understand the working of embedded system and robotics.

- The workshop was started with introduction to various components of a typical robot which are basic building block of any robot, It contains both electronics as well as mechanical parts. So students got familiar with basic building block of any robot.

## Report:

e-Yantra is a project initiated by IIT-Bombay sponsored by the Ministry of Human Resource Development under National Mission in Education through Information and Communication Technology. The mission of e-yantra project is to enable students and staff of Technical Institutions to take India's economy to a greater height by 2025 with the help of technological innovations. Our Management of I.T.S. Engineering College has the mission to grow a rich ecosystem of ideas and applications; it encourages faculty members and students' research activities in Robotics, Automation and Embedded system platform. Our Management is very keen in establishing many research labs in our campus and funded 5 Lakhs to establish Robotics and embedded systems lab in our college and aims to create the next generation of embedded system engineers with a practical outlook to provide practical solutions to real world problems. Our faculty members have attended two days' workshop and got trained through Face-to-face training in embedded systems and Micro-controller programming related to Robotics. Our Team Leader and members are also involved actively in the Task Based Training comprising of a total of six different tasks which is an endeavor to train teachers in Embedded Systems and Robotics through hands-on experiments which is given by IIT Bombay on Firebird V robot. Team members successfully completed all the six tasks. e-Yantra is a project to spread Embedded systems and Robotics education in colleges across India. The e-Yantra Lab Setup Initiative (eLSI) enables colleges to set up Robotics labs and teach Robotics and Embedded systems in an effective manner. E-Yantra Lab Setup Initiative (eLSI) is a holistic approach to. The aim of this workshop was to understand robotics and embedded system through Firebird V Atmega 2560 based robot. This was intended to make a step forward in understanding, working of electro-mechanical parts of robotics and how to integrate them to make a complete system.

The Department of Electronics & Communication of I.T.S. Engineering College in association with e-Yantra Lab Setup Initiative (eLSI), IIT Bombay organized a Two-Day Workshop on **Introduction to Robotics** for the teaching faculty in greater Noida and other neighbouring states. The inaugural function was held on 16<sup>th</sup> June 2023 at the institute.

The inaugural began with lighting of the lamp by the dignitaries – Director Dr. Mayank Garg, Dr. Monika Jain, HOD Electronics Communication Department, Dr. Setu Garg, Associate Professor, Mr. Shahid Khan, Mr. Prabhakar Sharma, Mr. Agha Asim Hussain, Mr. Navneet Chaudhary, Ms. Pragati Tripathi, Assistant Professor and Coordinator of the event, Mr. Kalind Kariya and Mr. Jaison Jose, Senior Project Engineer, e-Yantra IIT Bombay.

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Director  
ITS Engineering College  
Greater Noida

Dr. Mayank Garg, Director Engineering welcomed everyone and, in her message, urged the participants to take maximum advantage and to get the doubts clarified and spread this knowledge to your respective institutes.

Dr. Monika Jain, H.O.D. ECE addressed all the participants and welcomed Prof. Kavi Arya Principal Investigator, e-Yantra, IIT Bombay. She also stated that this workshop provides a very good platform to take off in our career. There is guidance, freedom and an environment for teaching and learning. She has introduced two initiatives from IIT Bombay, one being Remote Centre for IITB and second is the e-Yantra Laboratory under e-Yantra Lab Setup Initiative (eLSI). The purpose of which is to further education in India by thinking beyond, practically and to think differently.

The Overview of e-Yantra was through a live web session by Prof. Kavi Arya, Principal Investigator, e-Yantra, IIT Bombay, Ms. Ruchi Sharma, Dr. Anshu, Mr. Kiran Solanki Senior Project Manager, Core Team, e-Yantra. He expressed gratitude to the management of I.T.S. Engineering College for hosting this workshop at their campus and for having faith in the e-Yantra project. He explained about the project in detail to all the participants. Also, he elaborated on the initiatives taken up by them to train teachers and set up labs in their respective colleges. According to her this project is attaining popularity by word of mouth rather than self-promotion. Dr. Mayank Garg and Dr. Monika Jain thanked the e-Yantra Resource Persons, Management, e-Yantra Core Team and all the participants for being a part of this workshop.

## **OUTLINE**

### **Session I: DAY: 1**

- First session started with introduction of robotics and its components like sensors, actuators, Control unit, Intelligence, communication and power system. Each component separately taught and practical sessions done accordingly.
- After the end of this session, students and faculty members got to know about what are the sensors/actuators/Control Unit and how to program a control unit to interface them.
- Up to now they had performed individual interfacing of robot's components.

### **Session II: DAY: 2**

- In second session, students had started to integrate all the components to make complete system like a line follower robot.
- End of this session students and faculty members knew to make closed loop system, what are the components required and how to integrate them on embedded system. Each session had 4 hours.

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**Learning Outcome:**

- Participants learnt about Robotics technology.
- Participants got exposure to industrial application of robotics.
- Participants understood how to make Robotics based Projects.
- Participants know about the e-yantra lab and their activities.
- Participants have got the depth knowledge of Firebird-V Robot and its applications.
- They have also learned AVR programming.

**Conclusion:** The workshop was very effective for the participants as they learnt about Robotics technology and understood how to make Robotics based Projects.

**SM Links:**

**Day: 1 Post**

<https://www.facebook.com/560321492802193/posts/652998493534492>

<https://www.linkedin.com/feed/update/urn:li:ugcPost:7075443856636354561>

<https://www.instagram.com/p/CtjPm2YyhHm/>


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**Day:2 Post**

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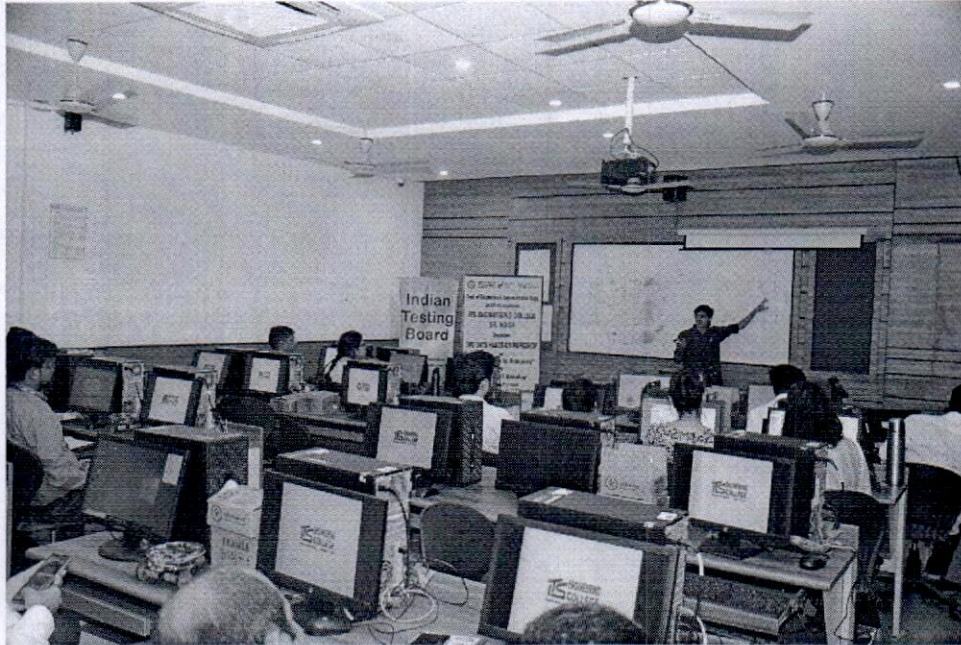
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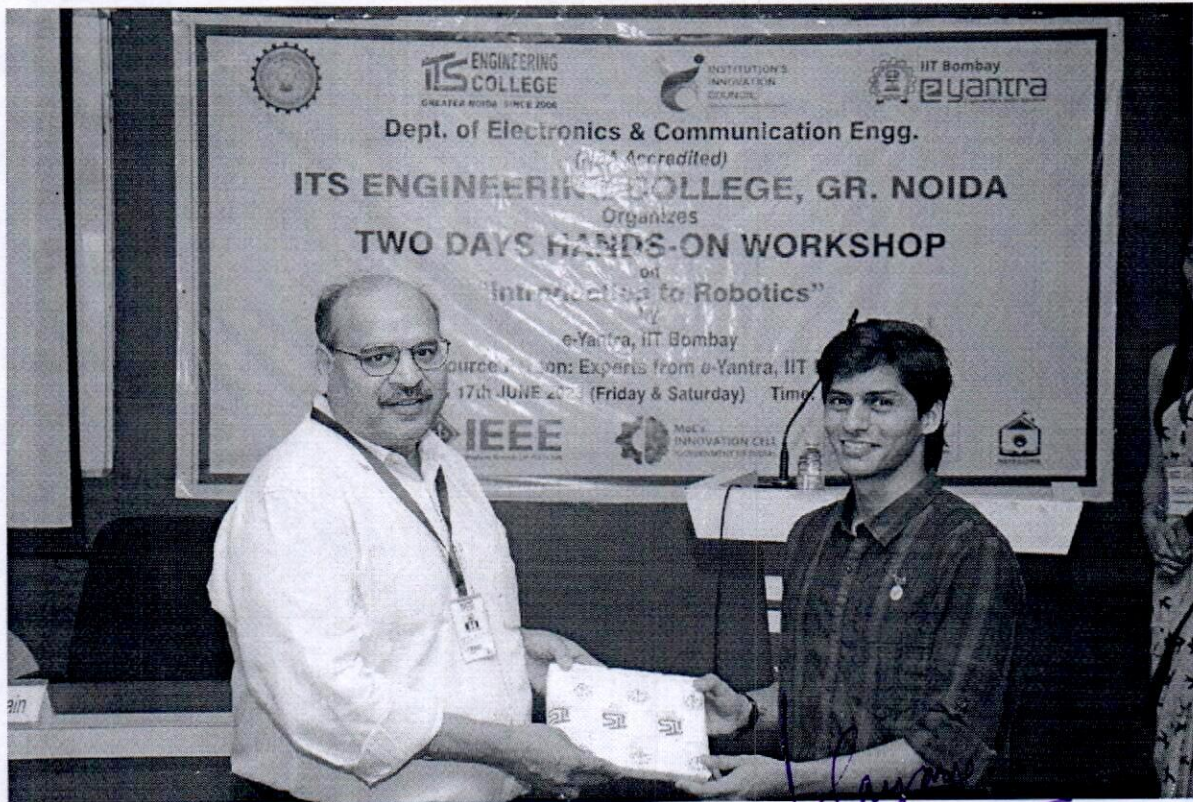
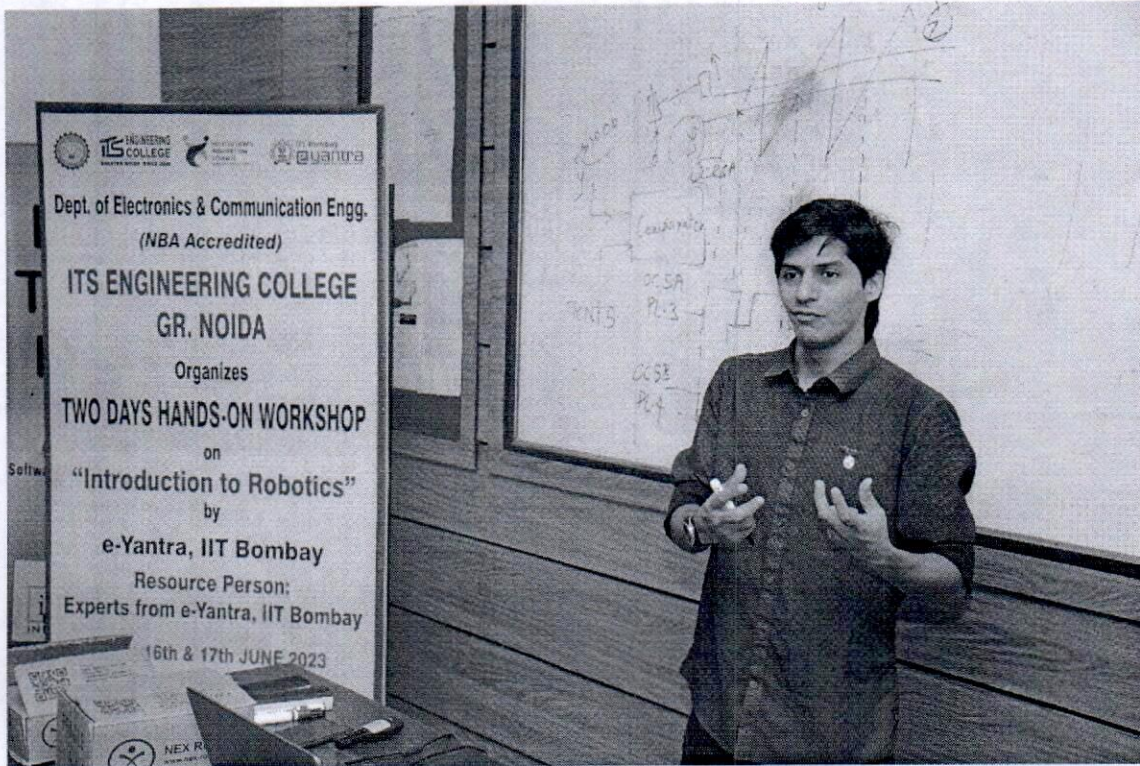
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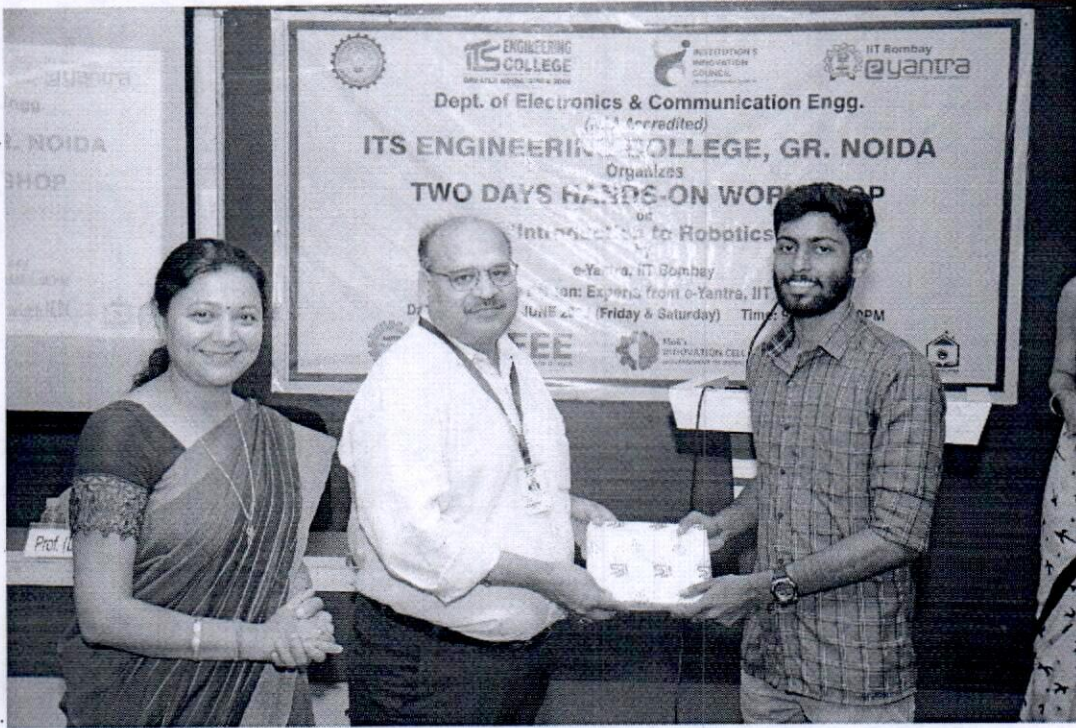
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*Prof. [Signature]*

*[Signature]*

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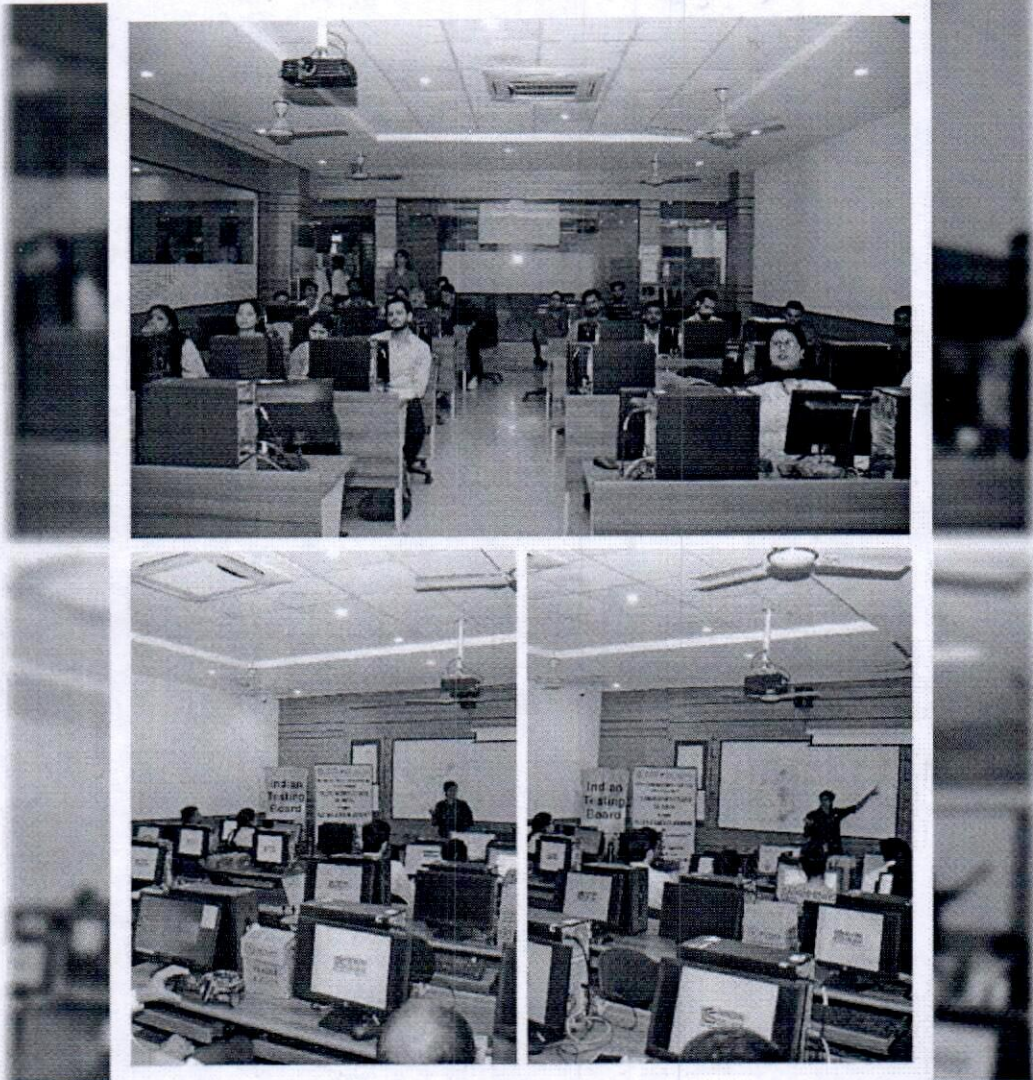
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Greater Noida



 **ITS ENGINEERING COLLEGE**  
GREATER NOIDA SINCE 2008

 INSTITUTION'S INNOVATION COUNCIL  
(Ministry of Education, Government of India)



 IIT Bombay  
**eYantra**  
Engineering a better tomorrow


**Dept. of Electronics & Communication Engg.**  
(NBA Accredited)


**ITS ENGINEERING COLLEGE, GR. NOIDA**  
Organizes


**TWO DAYS HANDS-ON WORKSHOP**  
on  
**"Introduction to Robotics"**  
by  
**e-Yantra, IIT Bombay**

Resource Person: Experts from e-Yantra, IIT Bombay  
Date: 16th & 17th JUNE 2023 (Friday & Saturday) Time: 9:00AM-6:00PM

  **IEEE**  
Student Branch UP-ITS DGN

 MoE's INNOVATION CELL  
(GOVERNMENT OF INDIA)

 NewGen IEDC  
Innovation & Entrepreneurship Development Centre



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Greater Noida



**ITS ENGINEERING COLLEGE**  
GREATER NOIDA SINCE 2006



**Dept. of Electronics & Communication Engg.**  
**(NBA Accredited)**

**ITS ENGINEERING COLLEGE  
GR. NOIDA**

**Organizes**

**TWO DAYS HANDS-ON WORKSHOP**

**on**

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**e-Yantra, IIT Bombay**

**Resource Person:**

**Experts from e-Yantra, IIT Bombay**

**Date: 16th & 17th JUNE 2023**

**(Friday & Saturday)**

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**IEEE**  
Student Branch IIT-ITS ECEN



**MoE's INNOVATION CELL**  
(GOVERNMENT OF INDIA)

**NewGen IEDC**  
Institution's Entrepreneurship Development Centre



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Director  
ITS Engineering College  
Greater Noida

**Coordinator**

Ms. Pragati Tripathi, Assistant Professor, ECE

**Organizing Secretary**

Dr. Setu Garg, Associate Professor, ECE

Mr. Shahid Khan, Assistant Professor, ECE

**Organizing Committee**

Mr. Navneet Kumar, Assistant Professor, ECE

Mr. Agha Asim Hussain, Assistant Professor, ECE

Mr. Prabhakar Sharma, Assistant Professor, ECE

Ms. Manju Singh, Assistant Professor, ECE

Mr. Upendra Agarwal, Assistant Professor, EEE

Dr. Rajiv Ranjan, Assistant Professor, EEE

Dr. Praveen Bhatia, Assistant Professor, EEE

**Student Members**

Mr. Shagun Beniwal


Ms. Prakshi Tomar

Mr. Avinash AB Roy

Mr. Ashwin Yadav

Instagram:  [www.instagram.com/itsengggg](http://www.instagram.com/itsengggg)

Facebook:  [www.facebook.com/ITSengggg](http://www.facebook.com/ITSengggg)

LinkedIn:  [www.linkedin.com/school/itsengggg](http://www.linkedin.com/school/itsengggg)

Visit Us:  [www.itsurl.com/vtga6gr](http://www.itsurl.com/vtga6gr)

**Chief Patrons**



Shri Sohil Chadha  
Hon. Vice-Chairman



Shri B.K. Arora  
Hon. Secretary

**Patron**

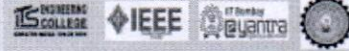


Prof. (Dr.) Mayank Garg  
Director I.T.S ENGINEERING COLLEGE

**Convener**



Prof. (Dr.) Monika Jain  
HOD ECE, I.T.S ENGINEERING COLLEGE



Two Days  
Hands on Workshop  
ON  
"Introduction to Robotics"  
by  
e-Yantra, IIT Bombay  
June 16 -17, 2023



Organized  
by  
**COE e-Yantra**  
Department of Electronics & Communication Engineering  
(NBA Accredited)  
I.T.S ENGINEERING COLLEGE, GREATER NOIDA  
(Affiliated to Dr. A.P.J Abdul Kalam Technical University,  
Lucknow, UP)



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*Mayank*  
Director  
ITS Engineering College  
Greater Noida

**ABOUT ITS**

ITS Engineering College, Greater Noida (NAAC & NBA Accredited), affiliated to Dr. APJ AKTU, Lucknow.  
The College is committed for offering engineering education in congenial environment with state-of-art infrastructure. The college is consistently working for industry-academia synergy, collaborative research & entrepreneurial initiatives. ITS Engineering College is approved as Business Institute under New GENIEDC, DST, Government of India and MSME, Government of India. With a mandate to skill building and inter-disciplinary collaborative learning multiple industrial Centre of Excellence have been established in the college including National Instruments, SMC, Rockwell Automation, Syscom Metro, Apple iOS, eYantra, Android Apps, R Systems - Innovation Development Centre, SALF and Indian Testing Board. The college has been awarded National Education Excellence Award-2015 for excellent contribution in promoting excellent industry-academic interface by Director/Chairman, AICTE. The college regularly organizes FDPs, Workshops, Conferences and Seminars, Guest Lectures to expose the faculty members and students with the recent technical trends by involving eminent national and international personalities. The college has been awarded BC Top Star Ranking in 2020, 2021 and 2022. The college is also recognized in ARIIA ranking as Top Twenty-five institutions in 2020 and "Excellent Band" in 2021. MoE Innovation Cell has recognized our ITSEC-IG as Mentor for Mentor-Mentee Program for harnessing innovation capacity building at other institutions too.

**ABOUT DEPARTMENT**

The Department of Electronics and Communication Engineering, under School of Engineering and Technology of I.T.S Engineering College was established in the year 2006 with its aim to produce globally competitive and socially sensitive engineering graduates along with a passion to bring out quality research in the frontier areas of Electronics and Communication Engineering. The Department offers four years Bachelor of Technology (B.Tech) programme (comprising eight semesters) in Electronics & Communication Engineering, affiliated to Dr. A. P. J. Abdul Kalam Technical University, Lucknow (formerly CPTU) and has been accredited by NBA (National Board of Accreditation), New Delhi. All throughout its sparkling history of 17 years, the Department of ECE has been known for its exceptionally strong undergraduate programme. The Department has always been on a progressive path, thanks to the experienced and dedicated faculty members who have a strong commitment towards providing quality education. To achieve educational excellence, the department focuses on project-based learning for which necessary hardware and software form an integral part of laboratories.

**RESOURCE PERSONS**

Experts:  
e-Yantra, IIT Bombay



**About the Workshop:**

e-Yantra is a flagship project of MoE through the National Mission on Education through ICT (NMEICT) to spread Embedded systems and Robotics education in Engineering, Polytechnic, and Science colleges.

This workshop is conducted as a part of e-Yantra Lab Setup Initiative (eLSI).

eLSI is a holistic approach to

- Impart theoretical and programming skilled based knowledge
- Provide hands-on experience to teachers and students through online training
- Help colleges set up their own robotics lab and innovation activities

**Topics to be covered:**

1. Introduction to Free Bird V robot
2. Introduction to AVR Micro-controller and Programming environment
3. Simple Motion Control using I/O ports
4. Robot velocity control using pulse width modulation
5. Introduction to LCD interfacing
6. Analog sensor interfacing using Analog to Digital conversion  
\*Interfacing with white line sensors  
\*Interfacing with Infrared range finder sensor
7. Interrupt programming  
\*Closed loop position control of robot using position encoders
8. Robot programming for white line following

**TARGET PARTICIPANTS**

• Faculty members - Research Scholars of university/engineering/ Polytechnic colleges of following disciplines.

- |       |                |
|-------|----------------|
| o ECE | o IT           |
| o CSE | o EIE          |
| o EEE | o ICE          |
| o ME  | o Mechatronics |

**ADDRESS FOR CORRESPONDENCE**

Electronics & Communication Engineering Department  
ITS Engineering College  
46, Knowledge Park III, Greater Noida,  
Distt. Gautam Buddh Nagar, Uttar Pradesh  
PIN- 201308, India.  
Email: eventsec@its.edu.in  
Mob No. :+91 7376304601  
Visit us at: www.itsengg.edu.in  
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*Handwritten signature in purple ink: K. Jayaram*  
Director  
ITS Engineering College  
Greater Noida



## Work Report

**Name of the Event:** Workshop on “Industrial Robotics & Control”

**Date of the Event:** 30<sup>th</sup> November 2022.

**Hosted by:** e-Yantra (COE) and IEEE student branch ECE, ITS Engineering College

**Speaker:** Mr. Ravindra Mishra, R& D Engineer, Sofcon India Pvt.Ltd.

**Venue of the event:** Naidu Hall

**Participants:** Faculty members and students of ITS Engineering College

### No. of Participants-

- Faculty Members: 5
- Students: 88

### Objectives of the Workshop:

- To provide hands-on training on Industrial Robotics & Control
- To develop skill on Robotics & Control Technology.

### Report:

e-Yantra (COE) and IEEE student branch Department of ECE, ITS Engineering College Greater Noida jointly organized a Workshop on “Industrial Robotics & Control” on 30<sup>th</sup> Nov 2022. The event was started by Saraswati Vandana and thereafter there was a welcome address by Prof. (Dr.) Monika Jain, HOD- ECE, ITS Engineering College Greater Noida. At the beginning of the session, the resource person Mr. Ravindra Mishra, R& D Engineer, Sofcon India Pvt. Ltd. explained the basic concepts of Robotics & Control. Mr. Mishra then explained working principle of Robotics, Motion Control, Drive circuit, ARDUINO UNO, Motion Control Simulation and Programming, Different Sensors, Node MCU, Servo Motor, Microprocessors, Microcontroller and Embedded System. He also demonstrated different robotics-based projects

  
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as Line Follower, Collision avoidance and related projects. He explained robotics control strategies in detail. Dr. Rajiv Ranjan, Convener, IIC-ITSEC concluded the event and extended the vote of thanks.

**Learning Outcome:**

- Participants learnt about Robotics technology.
- Participants got exposure to industrial application of robotics.
- Participants understood how to make Robotics based Projects.

**Conclusion:** The workshop was very effective for the participants as they learnt about Robotics technology and understood how to make Robotics based Projects.

**SM Links:**

<https://www.facebook.com/124969124271413/posts/5053209968113946/>

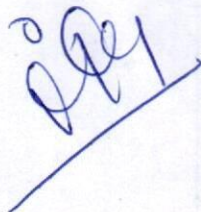
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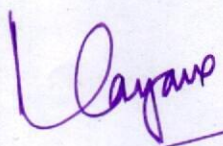
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<https://www.linkedin.com/feed/update/urn:li:share:7004062103380619264>

<https://www.instagram.com/p/CloC8XMOB52/>

<https://local.google.com/place?id=11010943153743415673&use=posts&lpsid=CIHM0ogKEICAgID-weC6dA>



  
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**Event Photos:**



**INSTITUTION'S INNOVATION COUNCIL**  
**I.T.S ENGINEERING COLLEGE, GREATER NOIDA**  
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Workshop on  
**"Industrial Robotics & Control"**

**Mr. Ravindra Mishra**  
R & D Engineer  
Sofcon India Pvt.Ltd.

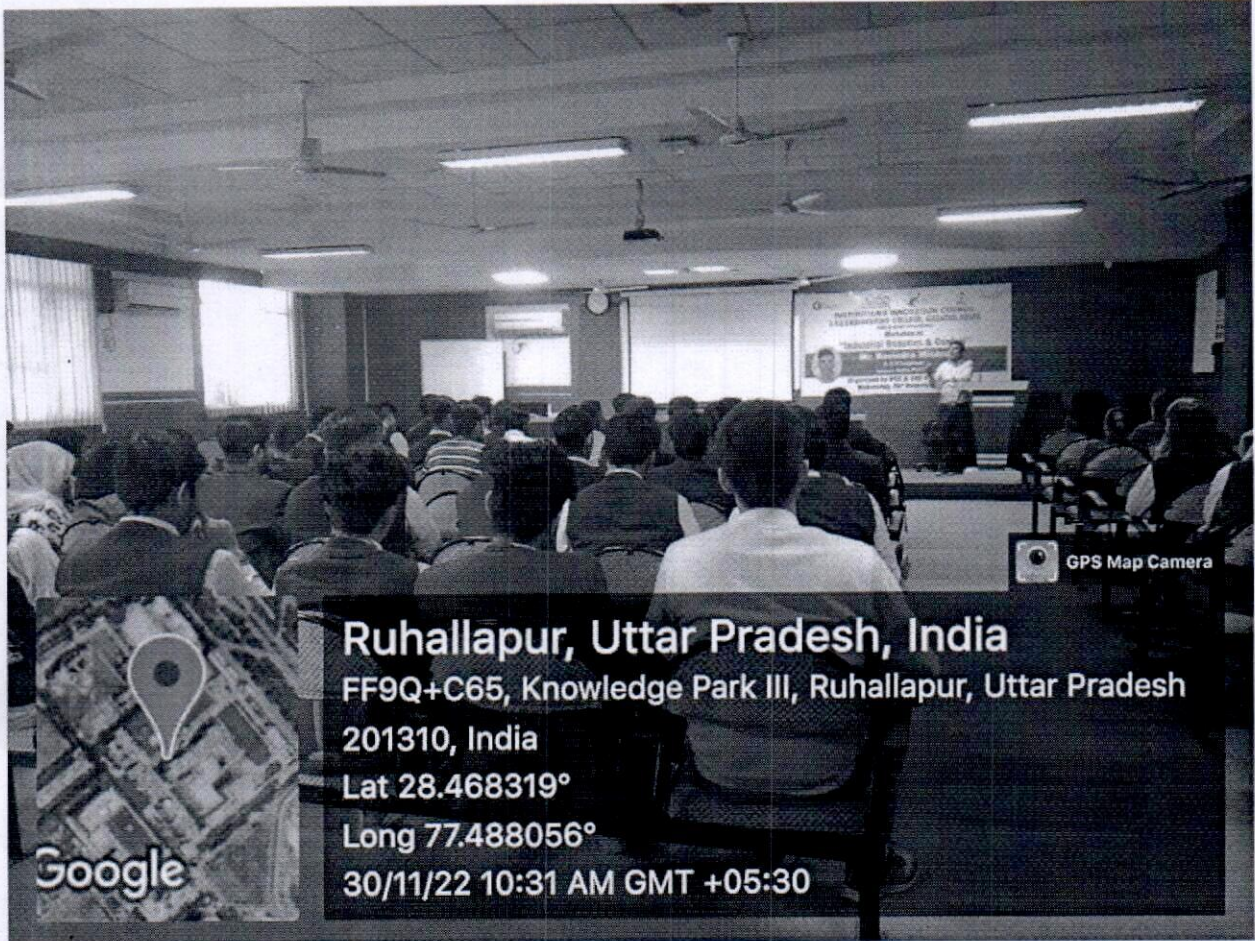
Organised by ECE & EEE Department

**Greater Noida, Uttar Pradesh, India**  
ENGINEERING & ACADEMIC BLOCK, ITS ENGINEERING COLLEGE,  
Knowledge Park III, Ruhallapur, Uttar Pradesh 201310, India  
Lat 28.468211°  
Long 77.488115°  
30/11/22 10:28 AM GMT +05:30

GPS Map Camera

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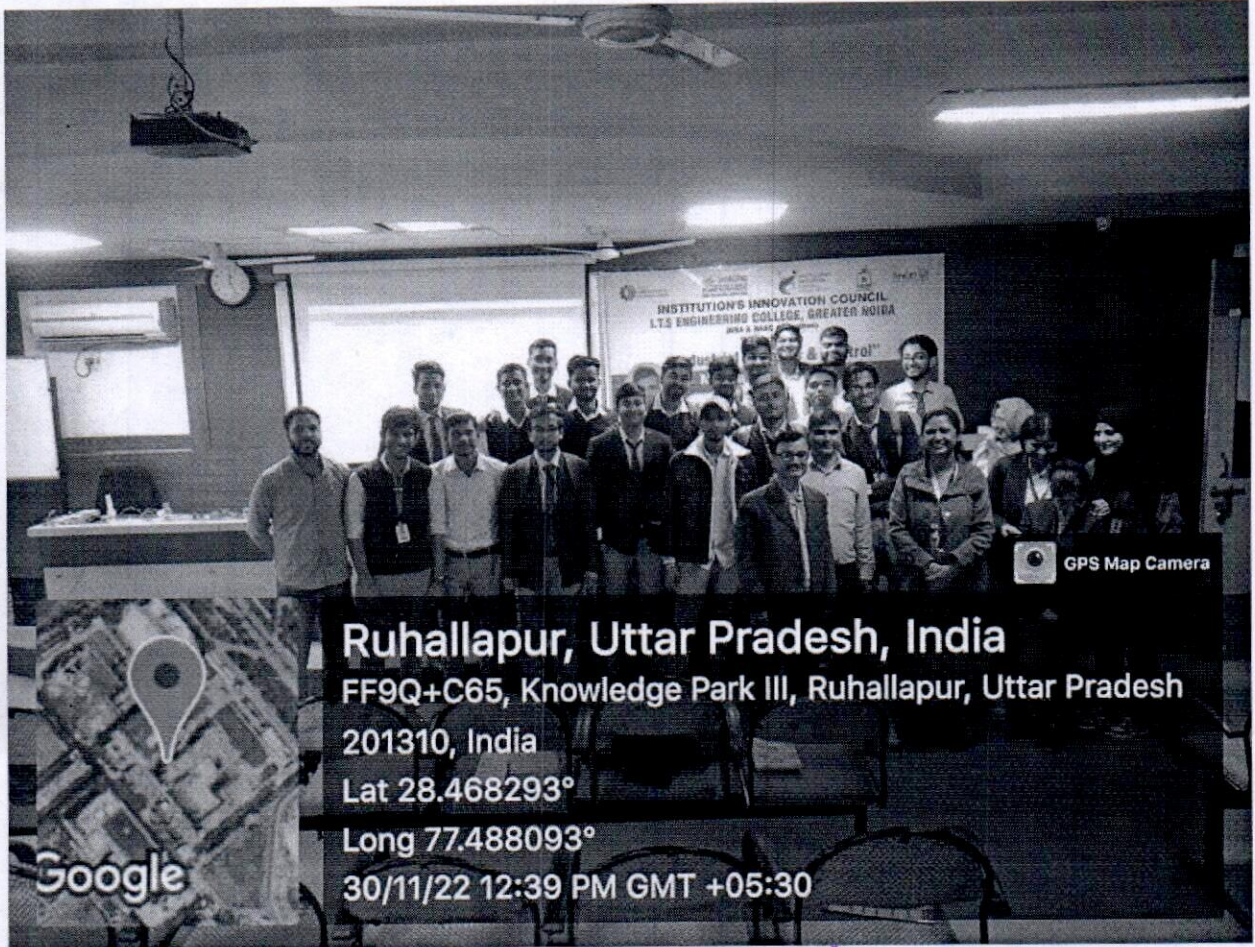


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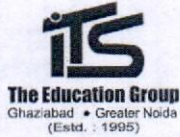
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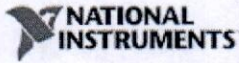


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## Work Report

**Name of the Event:** One Day Workshop on "Data Sciences"

**Date of the Event:** 24th November 2022.

**Hosted by:** NI (COE) of ECE Department & IEEE Student Branch, ITS Engineering College

**Speaker:** **Mr. Jitendra Kumar Sr. Data Scientist** & Mr. Sonu Parkash Founder and CEO of APPWARS Technologies Pvt. Ltd.

**Venue of the event:** Naidu Hall

**Participants:** Faculty members and students of ECE Department of ITS Engineering College

### No. of Participants-

- Faculty Members: 05
- Students: 40

### Objectives of the Workshop:

- To get aware the students about the various Data Science Tools and Application used in Industries

### Report:

NI (COE) and IEEE student branch of ECE Department of ITS Engineering College Greater Noida jointly organized One Day Workshop on "Data Science" on 24<sup>th</sup> November 2022 (Thursday). The event was started by Saraswati Vandana and thereafter there was a welcome address by Dr. Monika Jain HOD ECE, ITS Engineering College Greater Noida. The resource person **Mr. Jitendra Kumar & Mr. Sonu Prakash** discussed the key features of **Data Science** used in industry. They explained the students about Data Science in meaningful way. Data Science is a multidisciplinary approach that combines principles and practices from the fields of mathematics, statistics, artificial

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intelligence, and computer engineering to analyze large amounts of data. This analysis helps data scientists to ask and answer questions like what happened, why it happened, what will happen, and what can be done with the results etc. The students are motivated to take Data Science, as their career, as lot of job option are available in the market. Dr. Rajiv Ranjan, Convener, IIC-ITSEC concluded the event and extended the vote of thanks.

**Learning Outcome:**

- Participants learnt about Data Science.
- Participants got to know the key tools and application of Data Science used in Industries.
- Participants learn about computing theory, languages, and algorithms, as well as mathematical and statistical models.
- They also learnt about the principles of optimization to appropriately formulate and use data analyses.

**Conclusion:** The session was very fruitful for the participants, as they understood the facts and features of Data Science.

Sr. No	Name	Branch	Sr. No	Name	Branch
1	Aadrash	ECE 2 <sup>nd</sup> Year	1	Vikram	ECE 3 <sup>rd</sup> year
2	Sahzaad Bhatti	ECE 2 <sup>nd</sup> Year	2	Kanchan	ECE 3 <sup>rd</sup> year
3	Abhay	ECE 2 <sup>nd</sup> Year	3	Prasant Kumar	ECE 3 <sup>rd</sup> year
4	Md Gulab Nabi	ECE 2 <sup>nd</sup> Year	4	Parveen	ECE 3 <sup>rd</sup> year
5	Devraj Singh	ECE 2 <sup>nd</sup> Year	5	Navdeep	ECE 3 <sup>rd</sup> year
6	Sneha	ECE 2 <sup>nd</sup> Year	6	Kavita	ECE 3 <sup>rd</sup> year
7	Riya	ECE 2 <sup>nd</sup> Year	7	Umesh	ECE 3 <sup>rd</sup> year
8	Bhumika Pal	ECE 2 <sup>nd</sup> Year	8	Ayush	ECE 3 <sup>rd</sup> year
9	Siddarth Kumar	ECE 2 <sup>nd</sup> Year	9	Abhishek	ECE 3 <sup>rd</sup> year
10	Abhijeet	ECE 2 <sup>nd</sup> Year	10	Prasant	ECE 3 <sup>rd</sup> year
11	Sahwag Raj	ECE 2 <sup>nd</sup> Year	11	Lokesh	ECE 3 <sup>rd</sup> year
12	Sonu Kaumar	ECE 2 <sup>nd</sup> Year	12	Suman	ECE 3 <sup>rd</sup> year

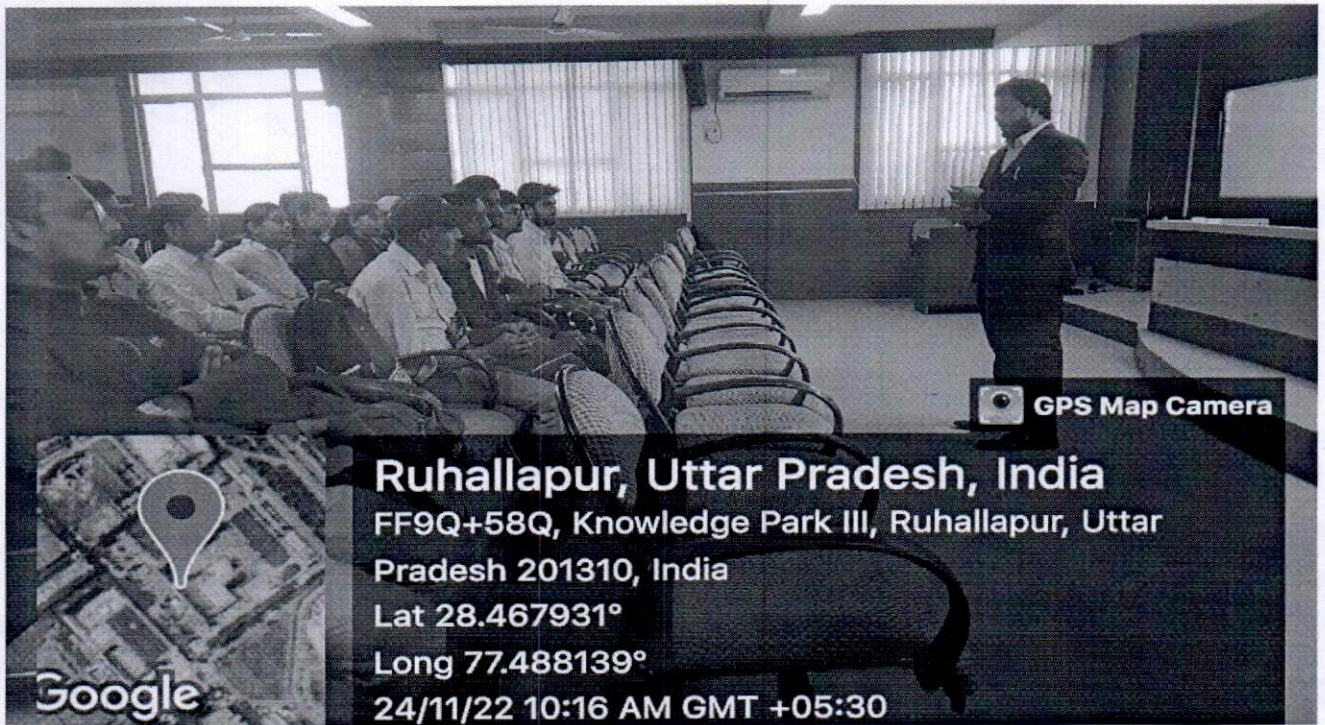
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13	Aditya Shankar	ECE 2 <sup>nd</sup> Year
14	Rakesh Sharma	ECE 2 <sup>nd</sup> Year
15	Akmal Hussain	ECE 2 <sup>nd</sup> Year
16	Ashwin Yadav	ECE 2 <sup>nd</sup> Year
17	Md Gulab Nabi 17	ECE 2 <sup>nd</sup> Year
18	Md Jaushit 18	ECE 2 <sup>nd</sup> Year

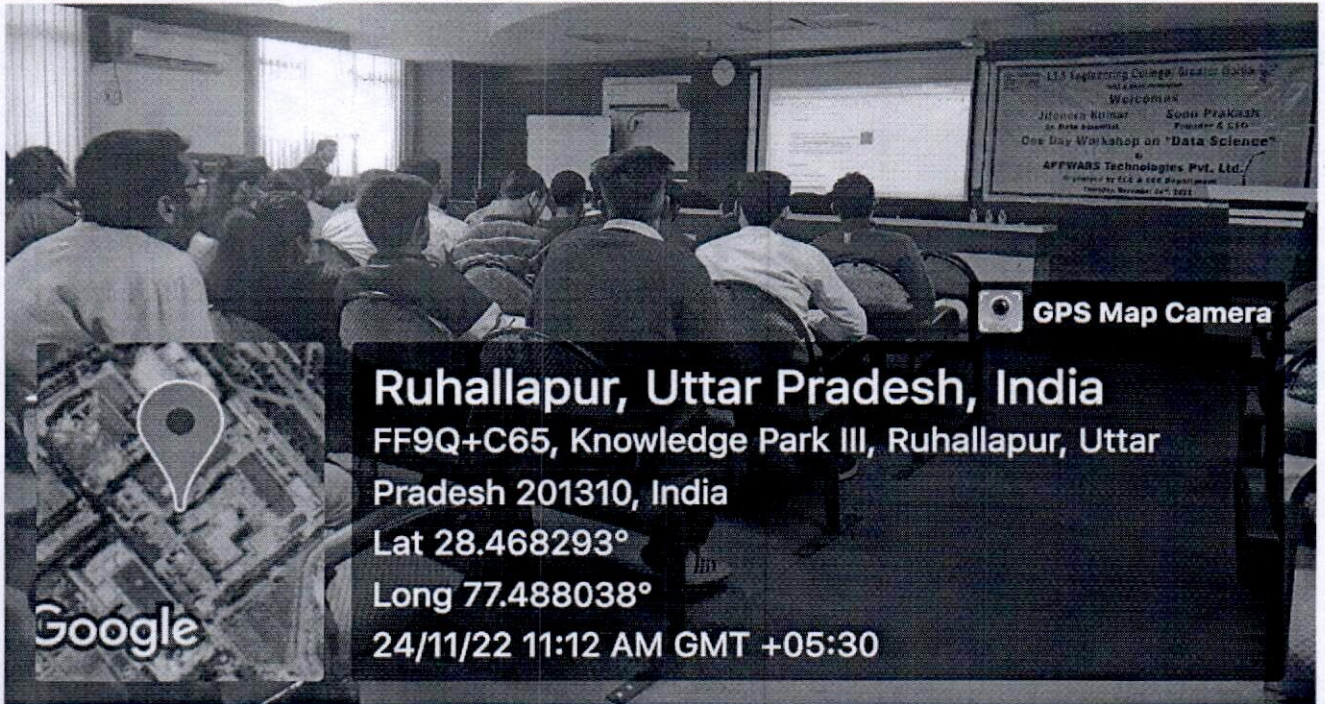
PRAGATI TRIPATHI  
(Co-coordinator AP ECE Department)

DR. MONIKA JAIN  
(HOD, ECE)

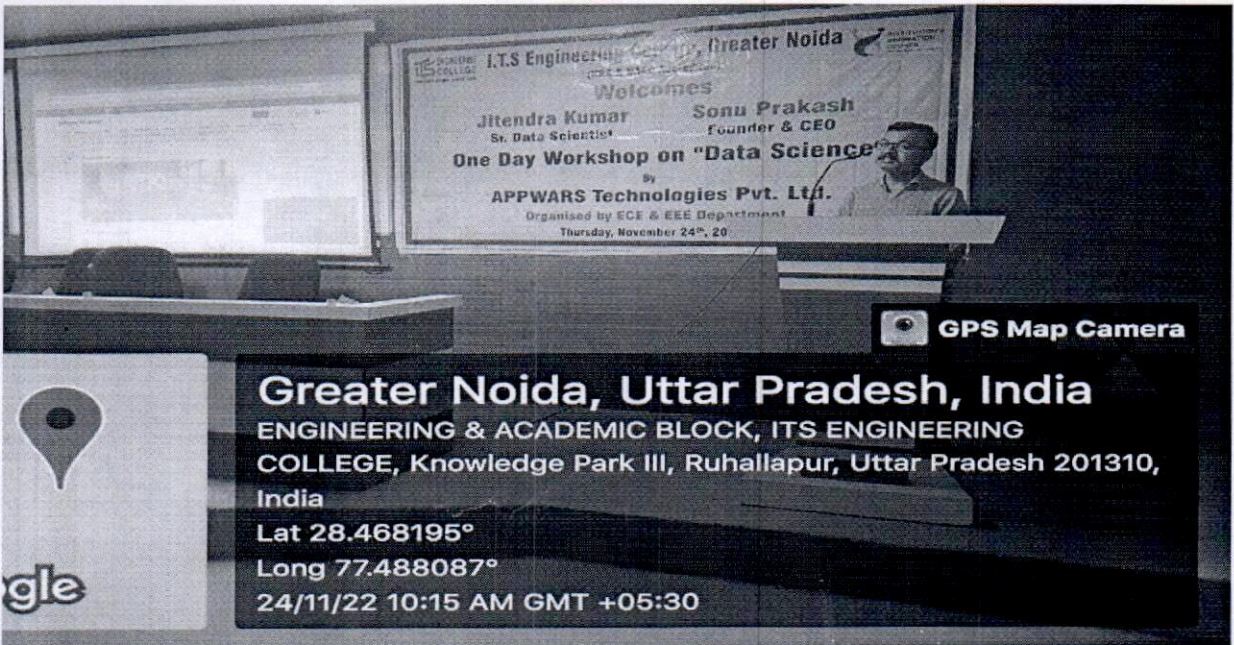


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ITS Engineering College  
Greater Noida



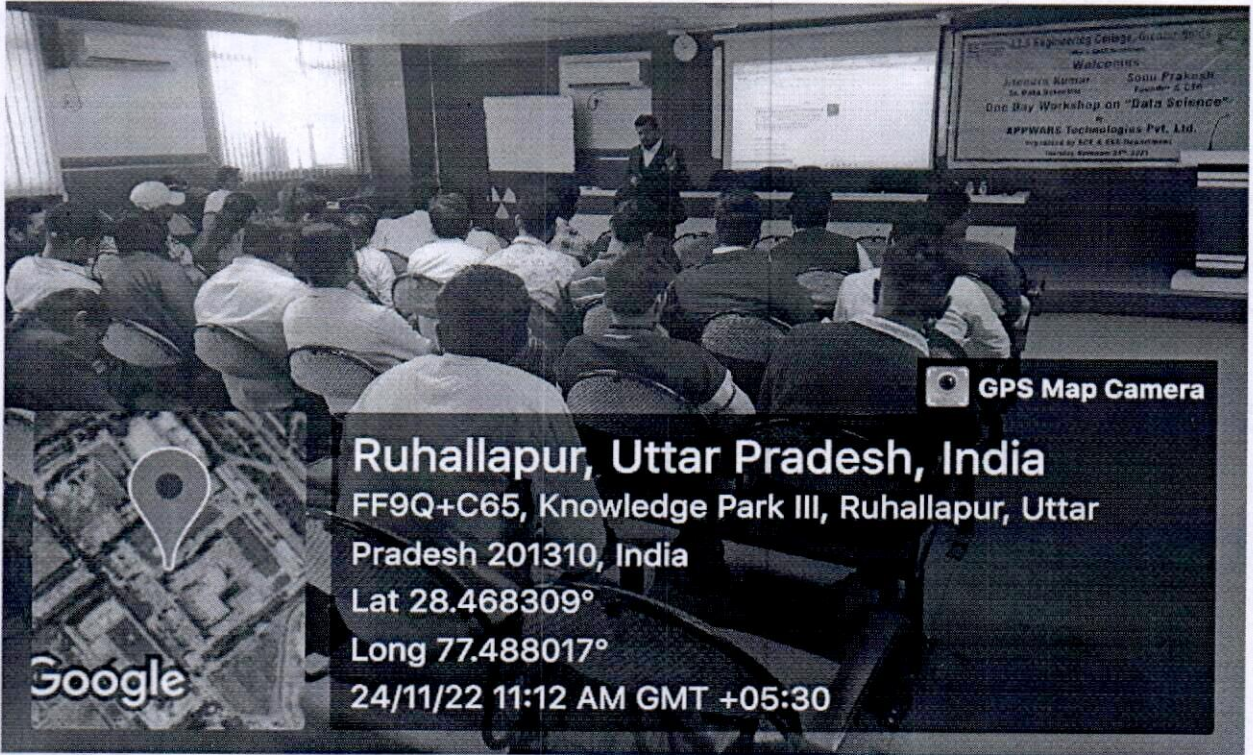
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**Greater Noida, Uttar Pradesh, India**  
ENGINEERING & ACADEMIC BLOCK, ITS ENGINEERING  
COLLEGE, Knowledge Park III, Ruhallapur, Uttar Pradesh 201310,  
India  
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Director  
ITS Engineering College  
Greater Noida



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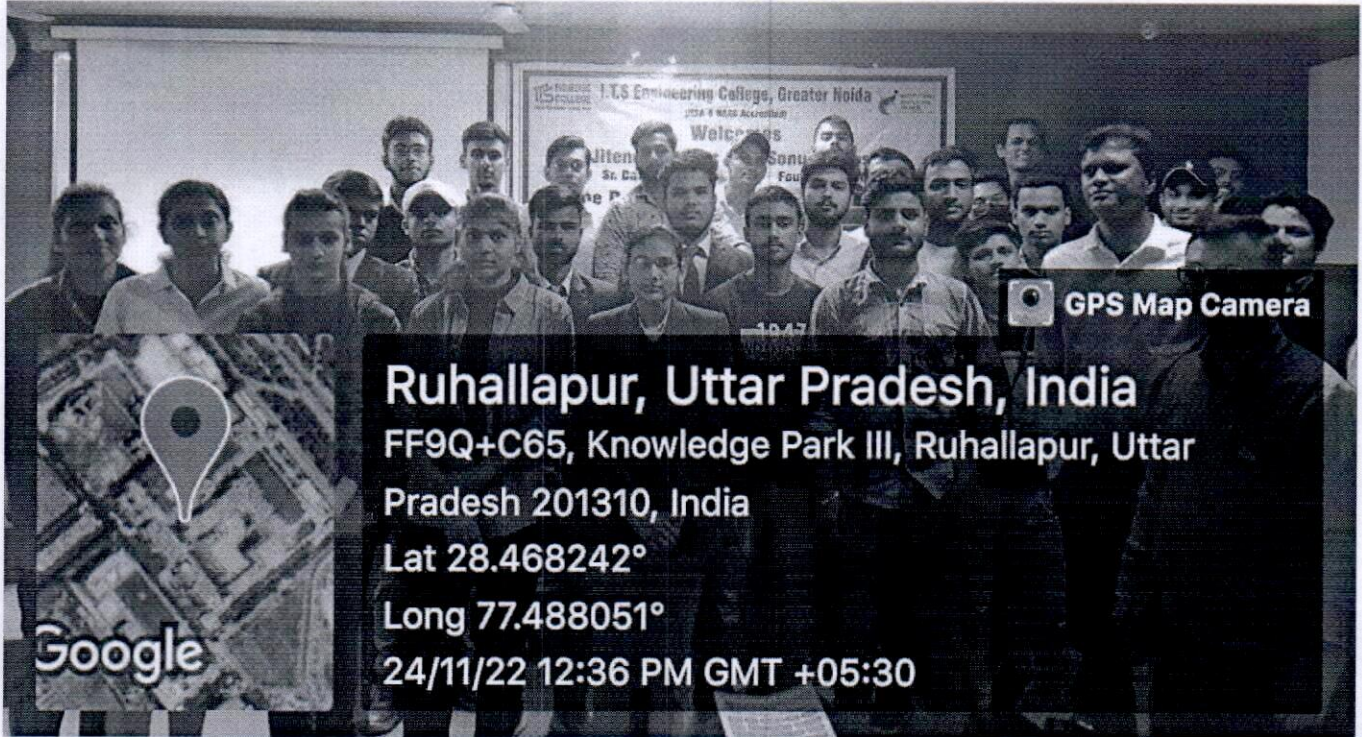


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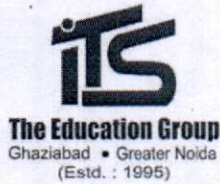
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ITS Engineering College  
Greater Noida



# I.T.S ENGINEERING COLLEGE GREATER NOIDA (A NAAC Accredited Engineering College)

**Name of Event:** 1 Day Workshop on "Python Programming: LIVE Projects"

**Date of Event:** November 6, 2022

**Organized by:** e-Yantra Innovation Centre Department of ECE

**Event Coordinator:** Ms. Pragati Tripathi (Assistant Professor- Department of Electronics & Communication Engineering)

**Speaker:** Mr. Kushal Pathak, Senior Software Engineer, Verve Gen Tech Pvt. Ltd.

**Objective:** The workshop was organized with the objective of promoting the awareness and skills among students about Python Programming and its applications in LIVE Industrial Projects.

### Report:

The workshop was started with absolute basics as many of the attendees were new to programming. In the beginning, speaker explained to them the difference between a compiled and interpreted language. He began with the concept of print statements and how it was used to output to the console. The participants used the print () statement in Python to print sentences, concatenate strings and perform basic calculations. While concatenating and printing various things students noticed that they were not able to concatenate a sentence and a number (unless the number was in quotes). And hence various basic data types like Integer (int, numerical value without a decimal point), Floating Point (float, fractional numbers), String (str, sentences) were introduced. The two new data types for those who did a bit of programming were Boolean and None. Boolean (bool) can hold only one of two possible values: True and False. The last type was None which is a special type indicating nulls. Along the way, he also introduced the participants to the concept of variables. Many of those who had experience with C++/Java remarked how easy it was to declare a variable in Python (without specifying its data type) and change its data type fluidly. The reason is that Python doesn't actually "hold" any data but is merely pointers to data objects. He then moved on to the basic assignment and arithmetic operations in programming. Many of them were new to the modulo (%), the floor division (//), and the power of (\*\*) operators. He then gave them a simple problem to solve for some practice using the things they learned. Comparison operators were then taught along with conditional statements, its syntax, working and how the or, and operators were used in it. Next, he moved on to looping statements. While being taught for loop, they were also introduced to the range () function in Python along with its start, stop and step parameters, which work exactly the same way in string slicing, also explained at the time. In the end, participants were given a few questions to solve, going from beginning to intermediate and they were encouraged to ask any doubts since he was nearing the end of the session. In this way the whole session was concluded.

**Outcomes:** The outcome of the workshop was to make students aware about the following concepts:

- Introduction to Python
- Python features and applications
- Data types, Operators

Pragati

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- Functions, recursion
- File handling
- OOPs concepts
- Modules and Packages
- Libraries used for Data Science.



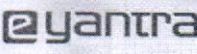
**Program Outline:** The workshop was organized with the objective of promoting the awareness and skills among students about Python Programming and its applications in LIVE Industrial Projects.

**No. of Students attended:** 72

**Faculty attended:** 05

**Timing:** 11.00 am - 6.00 pm

**Banner:**


ORGANIZED BY: Department of Electronics & Communication Engg


## ONLINE WORKSHOP

### PYTHON PROGRAMMING: LIVE PROJECTS

**SPEAKER**


**MR. KUSHAL PATHAK**  
Software Engineer, Verve Gen Tech Pvt. Ltd.






**MODERATOR**


**DR. MONIKA JAIN**  
IEEE STU Branch Counsellor,  
Prof & HOD- ECE, ITS Engineering College



**SUNDAY**  
6 NOVEMBER 2022





**TIME**  
11: 00 AM



**FACILITATOR**

**MS. PRACATI TRIPATHI**  
IEEE Member  
Assistant Professor-ECE  
ITS Engineering College

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 [www.itsengg.edu.in](http://www.itsengg.edu.in)

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*Pathak*

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Director  
ITS Engineering College  
Greater Noida

**List of Participants:**

1. Abhinav Kumar Kanth
2. Abhishek Yadav
3. Aman Pratap Singh
4. Ambika
5. Ayush Raj
6. Divya Verma
7. Harshit Mishra
8. Kanchan Gupta
9. Kashish Solan
10. Kavita Yadav
11. Komal Nagar
12. Lokesh Bisht
13. Prashant Kumar
14. Rahul Raj
15. Raju Kumar
16. Sanjeev Kumar
17. Suman Kumar
18. Umesh Kumar
19. Vikram Kumar
20. Parveen
21. Prashant
22. Navdeep Thakur
23. Deepak Mandal
24. Vivek Kumar
25. Rahul Yadav
26. Abhay Chauhan
27. Piyush Kumar
28. Sonu Kumar
29. Aditya
30. Mann Kumar
31. Aditya Kumar Yadav
32. Prabhat Kumar Mishra
33. Ankit Kumar
34. Harsh
35. Aniket Srivastava
36. Abhishek Patel
37. Aditya
38. Vishnu Kumar
39. Krish Saini
40. Saket Kumar
41. Vikas Manraj
42. Aadarsh
43. Abhay Sharma
44. Abhimanyu Kumar
45. Abhishek Kumar
46. Aditya Rana
47. Aditya Shankar
48. Akmal Hussain
49. Alok Kumar Singh
50. Ashwin Yadav
51. Avinash B Roy
52. Bhumika Pal
53. Devraj Singh
54. Gautam Negi
55. Harshit Raj
56. Kapil
57. Md Gulab Nabi
58. Imam
59. Md Tausif Raja
60. Nikhil Raj
61. Rakesh Kumar
62. Riya Chaudhary
63. Sahwag Raj
64. Sahzaad Bhatti
65. Shivam Kumar Yadav
66. Abhishek Sharma
67. Adarsh Kumar Mishra
68. Deepanjan
69. Shlab Kumar
70. Abdul Hasib
71. Suraj Kumar
72. Md. Aamir Raza

*K. Jayaram*

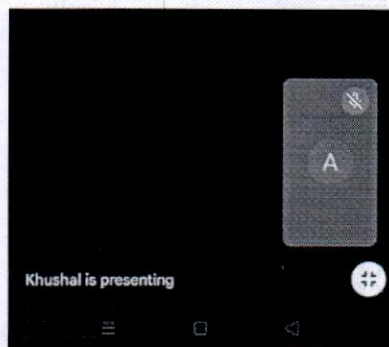
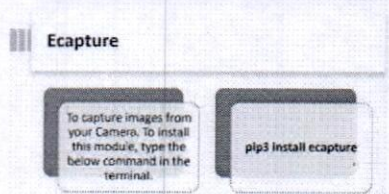
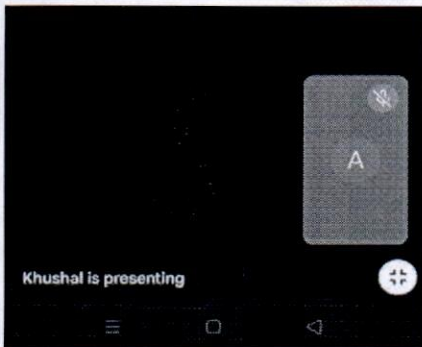
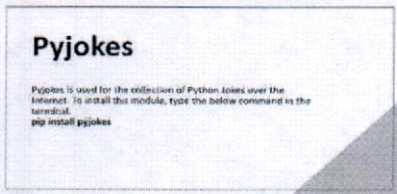
*Pratapathi*



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## Workshop Pictures:

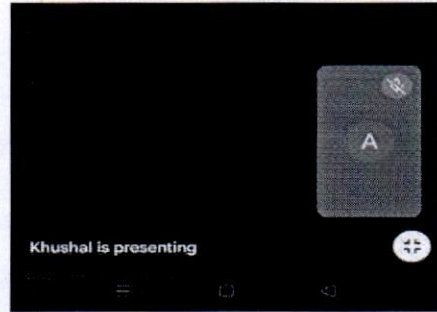
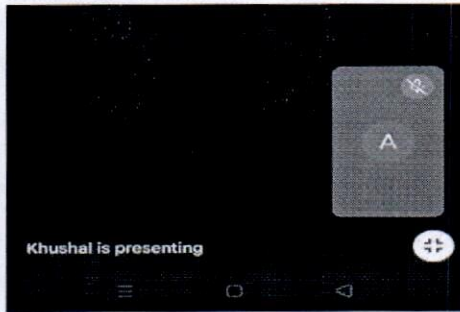
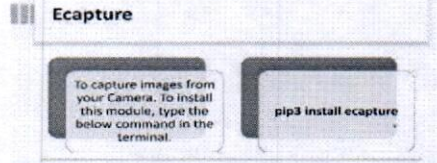
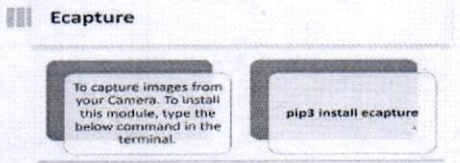
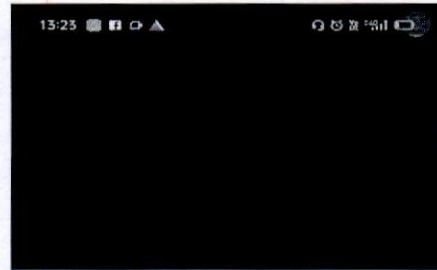


*Khushal*

Director  
ITS Engineering College  
Greater Noida

*Pranav Pathi*

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*Khayam*

Director  
ITS Engineering College  
Greater Noida

*Khurpatri*

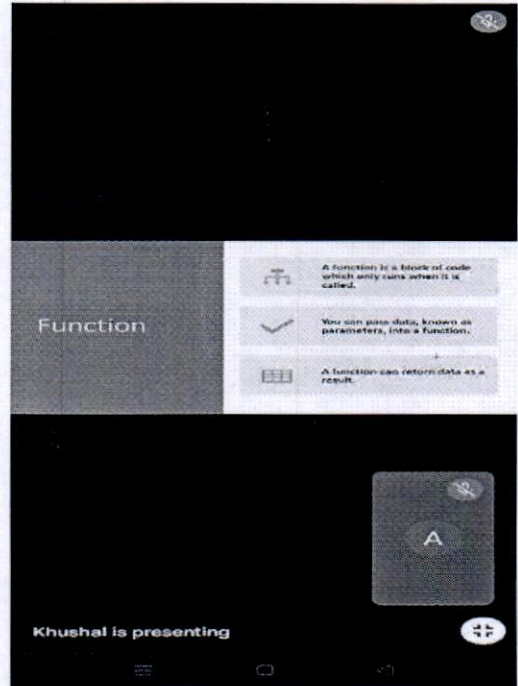
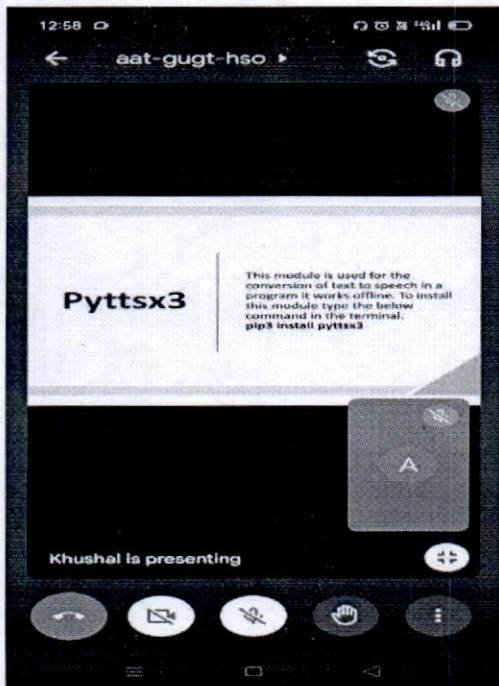
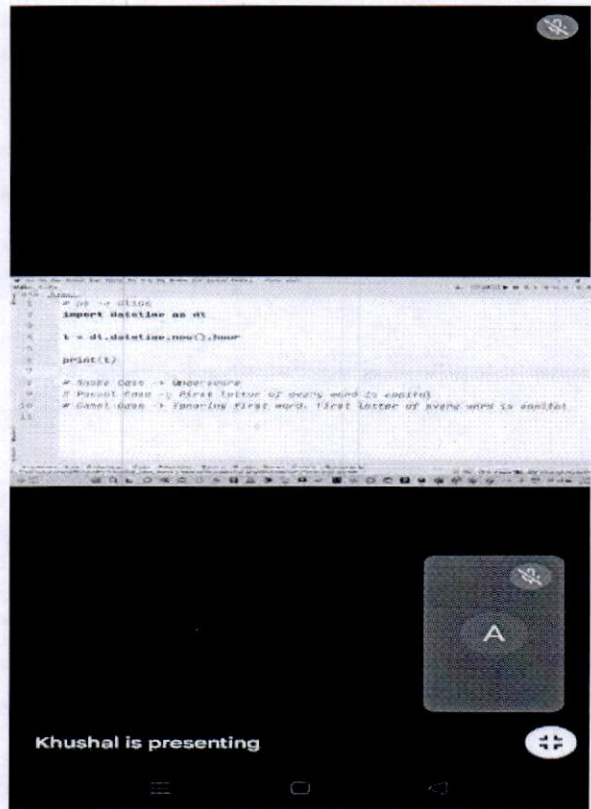
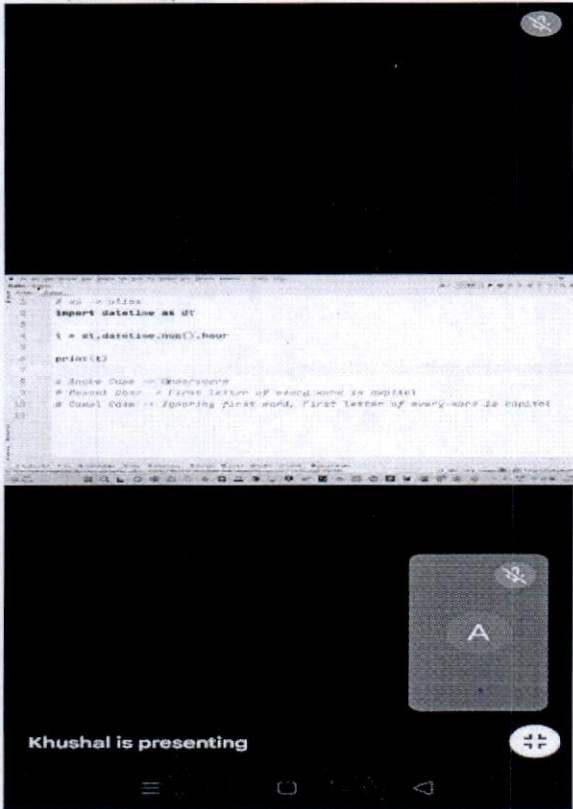
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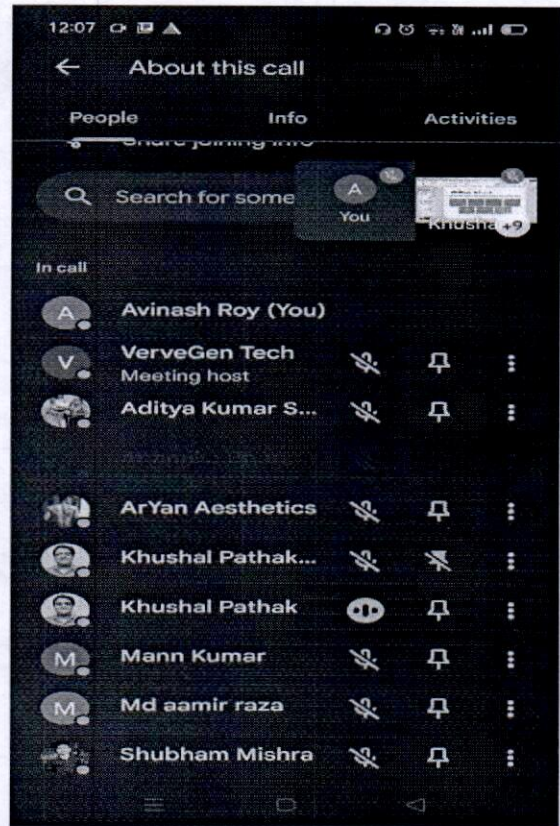
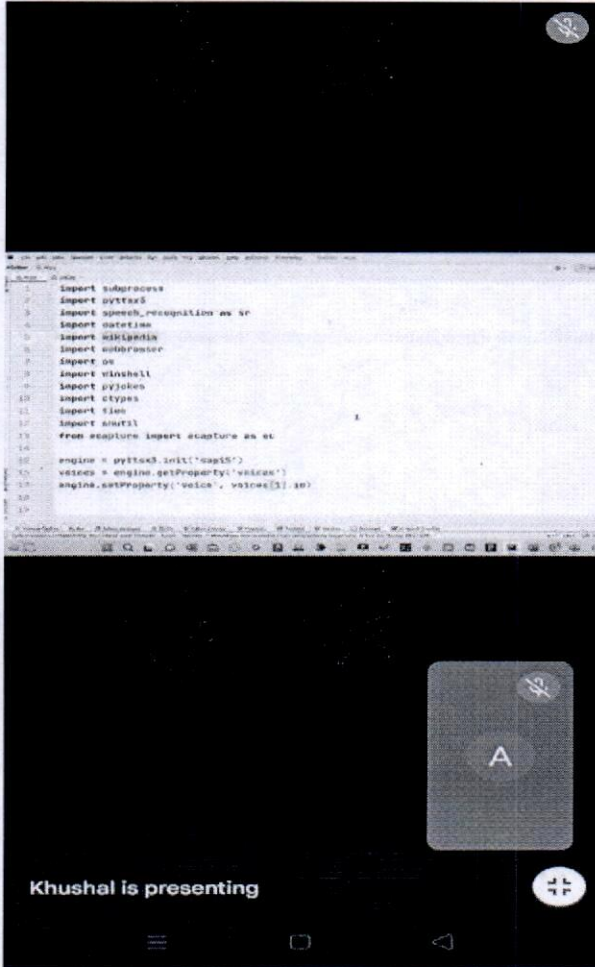
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*Handwritten signature: Anupam*  
Director  
ITS Engineering College  
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*[Handwritten signature: Vayans]*  
Director  
ITS Engineering College  
Greater Noida

*[Handwritten signature: Pragati]*  
Coordinator  
(Ms. Pragati Tripathi)