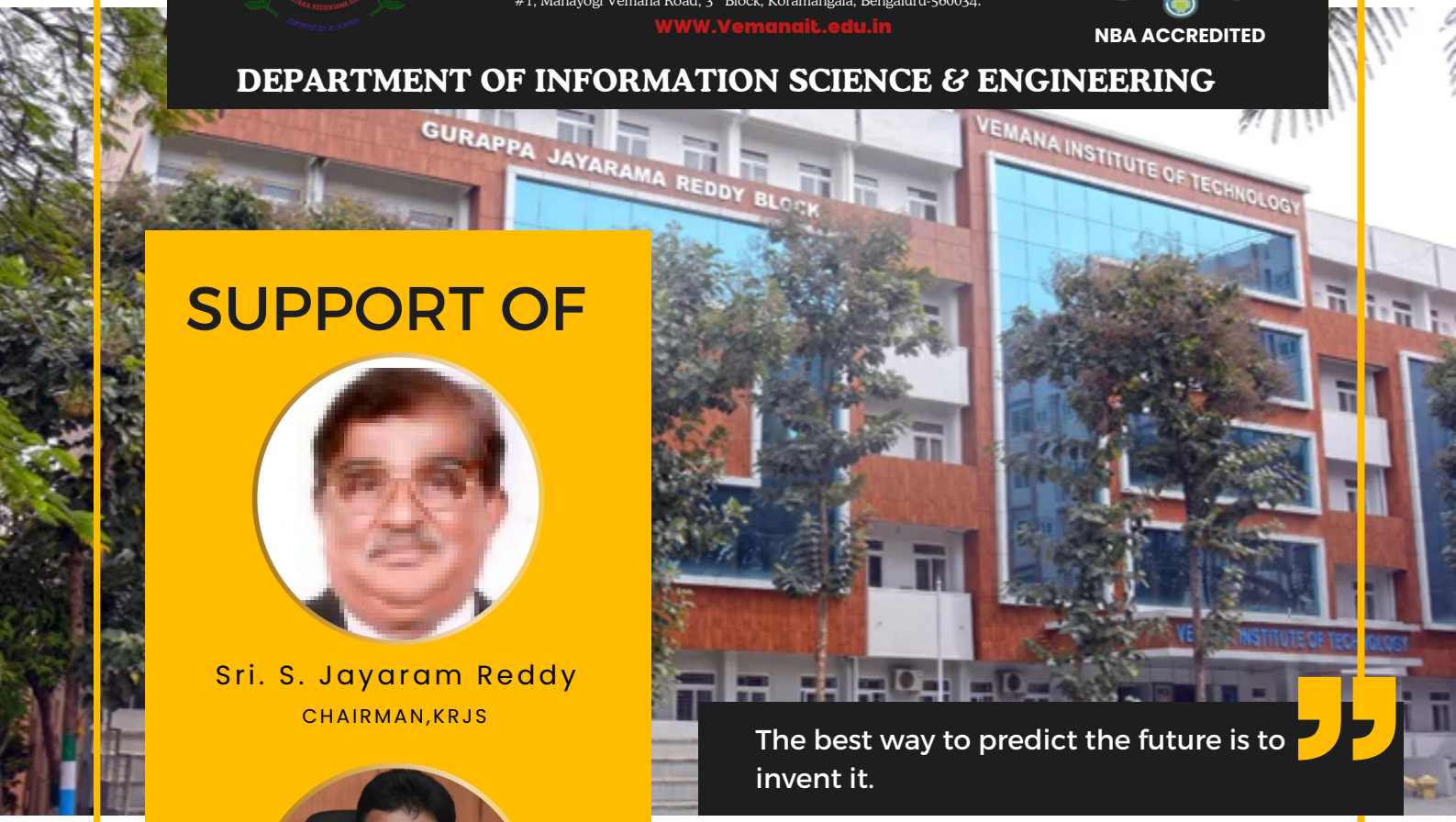
Karnataka ReddyJana Sangha

VEMANA INSTITUTE OF TECHNOLOGY

Approved by AICTE - New Delhi, Affiliated to VTU Belagavi & Recognized by Govt. Of Karnataka
#1, Mahayogi Vemana Road, 3rd Block, Koramangala, Bengaluru-560034.
WWW.Vemanait.edu.in

NBA ACCREDITED

DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING



SUPPORT OF

Sri. S. Jayaram Reddy

CHAIRMAN,KRJS

Dr. Vijayasimha Reddy B.G

PRINCIPAL, VEMANA IT

Dr. Rajanna M

HoD, DEPT OF ISE

> The best way to predict the future is to invent it.

AN EPITOME OF KNOWLEDGE

About The Department

The department of information science and Engineering(ISE) is a centre of Excellence providing in-depth technical knowledge and imparting Grassroots thinking in the field of information technology. The Department constantly thrives to nourish the true spirit & wisdom of information technology, into the younge aspirants. The department with its cohesive team of faculty members, offers a sound program at the UG and aims to output Engineers of Innovative Technology.

DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING

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VISION OF THE DEPARTMENT

To produce graduates with strong fundamentals in information technology to face challenges of global IT needs with ethical values.

MISSION OF THE DEPARTMENT

M1: To impart theoretical foundation and programing skills for the design and development of software systems.

M2: To produce information technologists to excel in professional,career,leadership,and entrepreneurship.

M3: To inculcate multi-disciplinary research ambience among them to transform their knowledge useful to the society.

PROGRAM EDUCATION OBJESTIVES(PEO'S)

After 3-4 years of Graduation, the ISE Graduates will be able to:

PEO1: Develop new strategies to solve engineering problems related to Information Technology.

PEO2: Pursue career in the IT industry, academia, engineering management and Research.

PEO3: Provide graduates a platform for life-long learning in innovative technologies.

PROGRAM SPECIFIC OUTCOMES (PSO'S)

After the successful completion of the program, the graduates will be able to:

PSO1: Design and develop computing systems inculcating the best practices for hardware implementation and software programming.

PSO2: Ability to provide discerning solutions based on the expertise in networking, database administration, distributed applications development and entrepreneur practices to the various societal needs.

EDITOR

MRS. SRIDEVI K.N
Assistant Professor, Dept Of ISE

MRS. MANJUSHREE C. V
Assistant Professor, Dept Of ISE

TUSHAR B. A
Student, Dept Of ISE

EDITOR'S COLUMN

It gives us an immense pleasure to introduce this Newsletter of Information science and engineering named "**SCIENTIA**" it is the Latin word for knowledge. By presenting this Newsletter we wish to provide you the same. The department of information Science & Engineering is composed of an Undergraduate program in information science and engineering with an intake of 120. Our Placement and result records are very impressive. The high quality research work being pursued by the faculty and students is very evident from the large number of research papers being published in referred journals. I thank all the students and faculties for their contribution

DEPARTMENT TOPPERS (2021-22)

6TH SEM TOPPERS

MONIKA M
1VI19IS065
89%

SHUBHA S T
1VI19IS101
88%

SYEDA SAARAH FATEMA
1VI20IS109
87%

4TH SEM TOPPERS

Vinay Kulkarni V
1VI20IS115
90%

Rohith R
1VI20IS077
88.25%

Sahana A
1VI20IS084
88%

6th International Conference on Advances in Computer and Communication Engineering (ACCE-2022)

ACCE-2022 inauguration by the dignitaries

Departments of CSE & ISE organised the 6th International Conference on Advances in Computer and Communication Engineering (ACCE-2022) on 12th and 13th August 2022 at Vemana Institute of Technology, Bangalore.

The conference was a successful confluence of research scholars, technical experts, domain specialists, academicians, faculty and student fraternity with a goal to present information on recent technological trends, reasearch and challenges in the field of Computer science.

The chief guest for the function was Shri. Praveen Kamath Kumbla, GM & Head HR, Wipro Pvt Ltd., Bangalore. The guest of honor was Dr Thippeswamy G, Professor, CSE and Dean Academics (Formerly), BMSIT&M, Bangalore.

The conference covered the important areas like **IOT, Machine Learning, Artificial Intelligence, Digital Image Processing (DIP)**, etc. There were **68** papers presented under different areas. All the papers are blind reviewed, accepted and presented papers will be published in peer reviewed journals like International Journal of Innovative Research in Advanced Engineering (IJIRAE) and International Research Journal of Computer Science (IRJCS) and indexed with crossref, crossmark, google scholar, academia.edu and maily in Mendeley – Elsevier with Digital Object Identifier (DOI), used to permanently identify an article and link to it on the web.

High-quality peer-review process was implemented for all the papers submitted and suitable corrections if any were suggested.

The conference concluded with participant's feedback, certificate distribution and photo session.

Workshops

Department of Information Science & Engineering organized a **"3- day workshop on "Joy of programming with Python" "**, from 7th November 2022 till 9th November 2022 with an intention to enlighten the information students to know the programming with

Python for 5th semester students, ISE. Workshop was conducted by industry expert.

Speakers : **Mr.Sandesh H S** Senior Full Stack Developer, Ernst and Young Having 6+ years of experience in Software Development, Testing and Expertise in Full Stack Web Development in Django, Python& Java. "Study Online" is the startup venture by Mr. Sandesh H S.

Day 1

Session 1:

Topics Covered:

1. Basics of Python
2. History of python
3. Coding of a sample program in different programming language like JAVA, C
4. Simplicity of Python

ISE Students of 5th semester attending the Workshop

DAY 2

1. Datatypes
2. Built-in functions
3. Tuple
4. List
5. Set
6. Dictionary
7. Strings
8. Functions

Students getting hands-on experience from the workshop

DAY 3

1. Function (continued) with factorial of a number using function
2. PVM - code, stack, heap, static segment

Workshops

Department of Information Science & Engineering organized a "**3- day workshop on "Java Programming" , from 24t November 2022 till 27th November 2022** with an intention to enlighten the information students to know the Java Programming for 3rd semester students. Workshop was conducted by industry expert.

Speakers : **Mr Sucheendra has over all 7+ years of industry experience in various domains including Software development and Corporate Training.** Currently working as a Software Engineer at Bookr. Currently working as a Front-End Engineer responsible for developing complex enterprise level user interfaces using technologies.

Following topics were covered :

DAY 1

1. Java fundamentals, data types, operators in java.
2. Decision-making statements, loop constructs in java

DAY 2

1. Creation of java classes, objects, constructors, declaration and initialization of variables.
2. Concept of Abstraction, packages
3. Abstract classes, abstract methods, and Interface in java

DAY 3

1. Java Collections.
2. Exception handling in java
3. File operations in java

Students attending the workshop

Students having hands-on session on Java programming.

Conclusion:

Workshop was essential for providing overall features of Java and it is an adjunct means of learning for the 3rd semester curriculum. Students gained more knowledge with hands-on session.

Guest Lecturer

A guest lecturer on "Gaming and Animation" was organized on 17th November 2022, for 7th semester ISE students.

Gaming and Animation

The Department of Information Science & Engineering Vemana Institute of Technology organized a Guest Lecture titled "**Gaming and Animation**" to the students of 7th semester of ISE dept. on 17th November 2022. The speaker was **Mr. Sandeep Industry expert, iCAT Design & Media college, Bommanahalli.**

Following topics were discussed :

1. Creativity in the logo design and the theme. Famous company logos were taken as case studies and the resource person elaborated the concept behind the logos which fascinated the students.

2. Difference between the live action movie and animation movies.

3. Roles associated with movie making and the role of software developers in gaming and animation field.

4. Pre-production, production and post-production activities behind gaming.

5. Visual experience to distinguish between short movie and animated movie.

6. Strategies to become a good gaming developer.

Short movie based on real time human imaging being screened.

Students being explained about the nuances in logo designs taking FedEx as a case study.

Conclusion:

Lecture was informative and interactive, students gained knowledge on animation and game developing process.

INTERNSHIP SESSION

The Department of Information Science & Engineering Vemana Institute of Technology organized Internship session on "Machine learning, Artificial Intelligence and Data Science" was conducted on 31st August 2023 at 3rd floor ISE Seminar Hall, Vemana Institute of Technology for the students of seventh semester and fourth semester. An overview of technological trends such as Artificial Intelligence (AI), Machine Learning, Robotic Process Automation (RPA), Block Chain and Internet of Things (IoT) was presented which will facilitate the students in choosing internships as per their domain of interest.

Resource Person:

1.**Mr.RAMKUMAR**.
Vicepresident-Rubixe

2.**Ms.Kalpana**
Team Lead-Rubixe

Ms. Akshitha Venneela and Dr.Rajanna M exhibiting the MoU copy

MOU with Rubixe

Memorandum of Understanding is accorded on Thursday , 31st August 2023 by and between Dr.Rajanna M, Professor & Head, Department of Information Science and Engineering, VEMANA INSTITUTE OF TECHNOLOGY ,No.1, MV Road, Koramangala , 3rd Block, Bangalore – 560034 and M/s Rubixe is a brand of THINK AHEAD INNOVATIONS PVT. LTD., Bengaluru with the goals to collaborate efforts in the areas of engineering and technology.

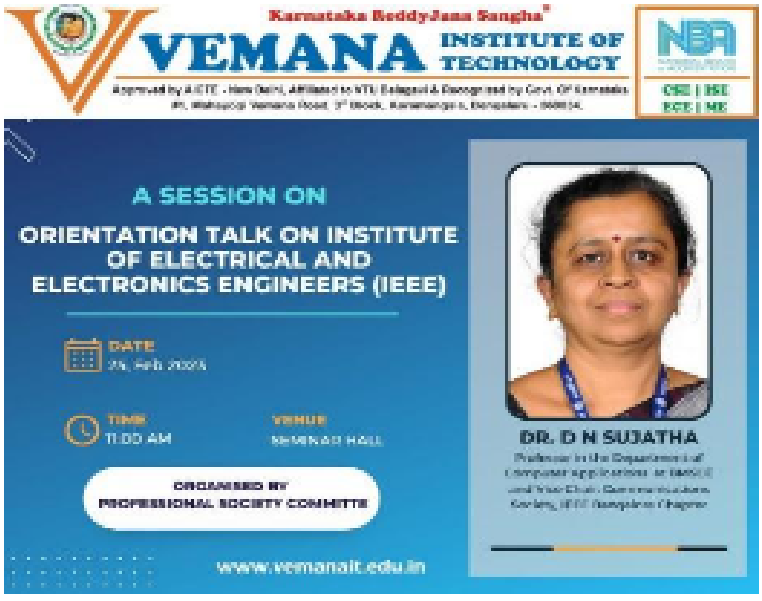
- Setting up Centre of Excellence in the college campus
- Plan and select Innovative Project ideas & Internships.
- Prepare and Conduct Value Added Courses with faculty and students
- Seminars/Webinars/ Open Discussion with faculty and students

Webinars/workshops attended by the faculty:

Mr. Manoj Kumar H attended 2- Day National Workshop on Design and Incubation for Innovating MSMEs on 7th-8th February 2023 organised by IISC, Bengaluru

Dr. S Nandagopalan,Mrs. B.Bhagyalakshmi,Mrs. Bhavana Nagaraj,Mrs. Chandana D C Mrs. Jyothi,Mr. Rakesh B,Mrs. Vijaya S CMr.Vinay B V attended Workshop on IP Protection in India, Patent drafting and filing process organised by Vemana Institute of Technology- KSCST IP Cell in association with ministry of MSME, Govt. of India.

Dr. Rajanna M,Dr. S Nandagopalan,Mrs. Aruna Reddy H, Mrs.B.Bhagyalakshmi, Mrs.Bhavana Nagaraj Mrs. Jyothi Mr. Rakesh B Mrs. Sridevi K N Mr.Vinay B V attended Orientation talk on Institution of Electrical and Electronic Engineers (IEEE). Organised by Vemana Institute of Technology – Professional Society Committee.



Mrs. Aruna Reddy H,Mrs. Bhavana Nagaraj,Mr. Rakesh B S,Mrs. Vijaya S C attended Intellectual Property Rights on 7th October 2022 organised by Presidency University

Mrs. Bhavana Nagaraj ,Mrs. Lakshmishree K,Mr. Sathyanarayana N.,Mr. Rakesh B S Attended Online National level Seminar on "EFFECTIVE IMPLEMENTATION OF NEP – MULTIDISCIPLINARY EDUCATION AND STRATEGIES" on 10th to 12th November 2022 organised by Sairam College of Engineering,Anekal,Bengaluru

Mr.Vinay B V attended Awareness workshop on Outcome Based Education and Accreditation on 16th January 2023 organised by BMS College of Engineering , Bangalore.

CONFERENCES

- **DR. NANDAGOPALAN S** " DETECTION OF DEPRESSION USING ACOUSTIC AND TREATMENT RESPONSE PREDICTION USING MACHINE LEARNING", PUBLISHED IN IRJCS JOURNAL 2393-9842, VOL 9 , ISSUE NO. 8 DOI:> **HTTPS://DOI.ORG/10.26562/IRJCS.2022.V0908.006 AUGUST 2022**

- **DR. NANDAGOPALAN S** " SMART DETECTION OF DAMAGED ROADS USING MACHINE LEARNING", PUBLISHED IN IRJCS JOURNAL 2393-9842, VOL 9 , **ISSUE NO. 8 DOI:> HTTPS://DOI.ORG/10.26562/IRJCS.2022.V0908.27 AUGUST 2022**

- **MRS. SRIDEVI K N** " AGRICULTURE ANALYSIS USING ENSEMBLE LEARNING TECHNIQUE", PUBLISHED IN IRJCS JOURNAL 2393-9842, VOL 9 , **ISSUE NO. 8 DOI:> HTTPS://DOI.ORG/10.26562/IRJCS.2022.V0908.27 AUGUST 2022**

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- **MR. VINAY B V** " DIABETES PREDICTION USING MACHINE LEARNING", PUBLISHED IN IRJCS JOURNAL 2393-9842, VOL 9 , ISSUE NO. 8 DOI:> **HTTPS://DOI.ORG/10.26562/IRJCS.2022.V0908.30 AUGUST 2022**

- **MR. VINAY B V** " MEGACOSM - DETECTION AND CLASSIFICATION OF ASTRONOMICAL OBJECTS", PUBLISHED IN IRJCS JOURNAL 2393-9842, VOL 9 , ISSUE NO. 8 DOI:> **HTTPS://DOI.ORG/10.26562/IRJCS.2022.V0908.30 AUGUST 2022**

ACHIVEMENT

Sports enthusiastic students in ISE actively participated in inter college athletic meet for sports such as basketball, football, volley ball and table tennis.

- Vemana IT NCC students and faculty enthusiastically participated in **'Yogathon youth festival 2023'**, organized by the **Government of Karnataka** on January 15th 2023.

- **"Yuva Sambhashane – Charche with Common Man CM "**, an arena to interact with the **Honarable Chief Minister of Karnataka, Shri Basavaraj Bommai** was scheduled on 18th January 2023. **Twenty five students from the department of ISE** along with other students of Vemana IT participated actively to interact with the Chief Minister.

- **Vemana Jayanthi** was celebrated with pomp and fervor on 19th January 2023 to mark the **611th** birth anniversary of Mahayogi Vemana. Faculty and students participated with great reverence to the Mahayogi.

- **Lion's International regional meet was held on 22nd January 2023** at Koramangala Club to release the Leo club banner. Vemana IT Leo club members participated to discuss the general progress and receive the banner.

- **NSS/NCC team celebrated nation's 74th Republic Day on Jan 26th** in the college campus to commemorate the spirit of independent India.

RESEARCH PUBLICATIONS

Mr. Sathyanarayana N *"Vehicle type detection and classification using enhanced ReliefF algorithm and Long ShortTerm memory network"* **Springer**, a leading global scientific, technical international publisher has published a paper, accepted by Journal of The Institution of Engineers (India) Series B, on 5th December 2022. The DOI of the paper is: https://doi.org/10.1007/s40031-022-00838-z

TRAINING / AWARENESS PROGRAMS:

- Amity Business School conducted an awareness program to the students of **7th semester on 12th December 2022** on the skillsets required for trending jobs.

- **Universal Human Values-Social Connect initiative:** Social Connect Team of Vemana IT conducted a co-curricular activity "Food Walk – Aahara Mela" on January 3rd in accordance with 'Universal Human Values' subject.

- **Food stalls from 5 regions of Karnataka was setup in the college campus to achieve the following objectives:**

1. Get to know city's culinary practices, **food lore**
2. An exposure to indigenous materials of the region used in cooking

Following learning outcomes were derived from this initiative:

1. Enable the students to get engaged with the NGOs, Social enterprises on addressing social needs through innovative technologies
2. Provide platform for the students to communicate and get connected with the surroundings.
3. Create responsible connection with the society.

TRAINING / AWARENESS PROGRAMS:

Orientation Program:

"**75 students' satellite at Vemana Institute of Technology**", a second orientation program was organized on 13th January 2023 by Vemana IT in association with Indian Technology Congress Association (ITCA). **Dr. K Gopalakrishnan, Secretary General of ITCA** addressed the students about the need for technical skills and soft skills as the prerequisite for the successful completion of the program. Twenty students from the department of ISE enthusiastically participated.

Universal Human Values-Social Connect initiative: Social Connect Team of Vemana IT organized a co-curricular activity "Heritage Walk", a trip to heritage place **"Melukote"** and surrounding pilgrimage places on January 17th in accordance with 'Universal Human Values' subject to achieve the following learning outcomes for the 3rd semester students.

- Knowing the history and culture of the city.
- Connecting to people around through their history.
- Knowing the city and its craftsman.

Universal Human Values-Social Connect initiative: A talk on **water conservation** was organized by Vemana IT Social Connect and Responsibilities team for all the 3rd semester B.E students in Vemana- IT auditorium.

Significance of water conservation, the process of water purification, urban water management, pragmatic solutions for efficient urban water supply and various water reservoirs were discussed.

TRAINING / AWARENESS PROGRAMS:

Universal Human Values-Social Connect initiative:

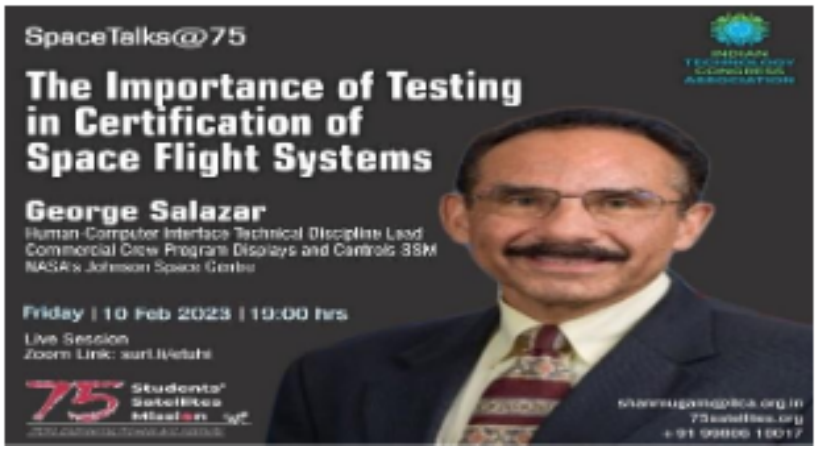
A talk on "Prospects of Organic Farming and Waste management for Soil Sustainability." by Dr. Boraiah Bheemappa was organized by Vemana IT Social Connect and Responsibilities team in association with University of Agricultural science GKVK, Bengaluru for all the 3rd semester B.E students in Vemana- IT auditorium.

Universal Human Values-Social Connect initiative: Students' visit to organic farming facilities at UAS, Bengaluru

In continuation with the seminar on "Prospects of Organic Farming and Waste management for Soil Sustainability", the students visited GKVK campus , Bengaluru to gain insights on the organic farming facilities.

TRAINING / AWARENESS PROGRAMS:

Orientation Program:



"Scope of satellite building and its requirement "orientation program was organized on 24th December 2022 by Vemana IT in association with ICTA. First year students of ISE enthusiastically participated along with the other stream students

"Space talks@75- The importance of Testing in Certification of Space and Flight Systems "webinar was organized for the students by Vemana IT-ISRO Space program on February 10th via Zoom platform.