



Dayananda Sagar University

Bengaluru

SOE-BULLETIN

The Official Newsletter of **School of Engineering**



SCHOOL OF ENGINEERING

Vision

To Transform life through Excellence and Innovation on in Engineering Education and Research with an emphasis on Sustainable, Inclusive Technology and Global needs.

Mission

To Develop School of Engineering at Dayananda Sagar University, as Center of Excellence by imparting Quality Education and Research to generate highly Competent, Skilled and Humane manpower to face emerging Technological, Scientific and Social challenges with Ethics, Integrity, Credibility and Social concern.



Department of Computer Science & Technology

Industrial Visit - ABAI- AVGC Center of Excellence

The Department of Computer Science and Technology (SOE) of Dayananda Sagar University conducted an industrial visit for the students of the Third Semester to the ABAI-AVGC Center of Excellence. The event, which took place on 29th December 2022 brought to light the immense scope of the global AVGC industry and the various facilities the ABAI Center of Excellence provides. The 3rd semester CST students of 43 nos. went for this visit and they were asked to write reflection notes on the same.



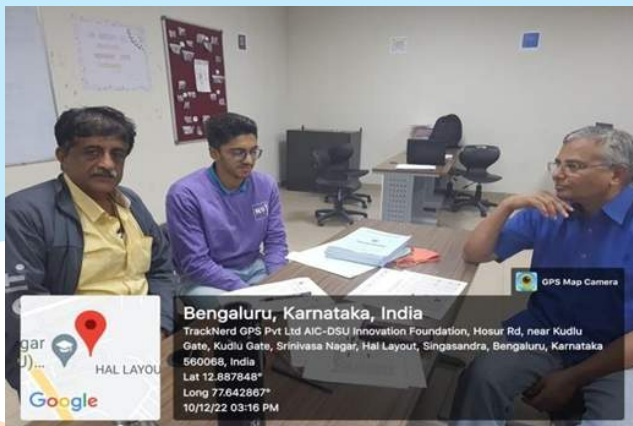
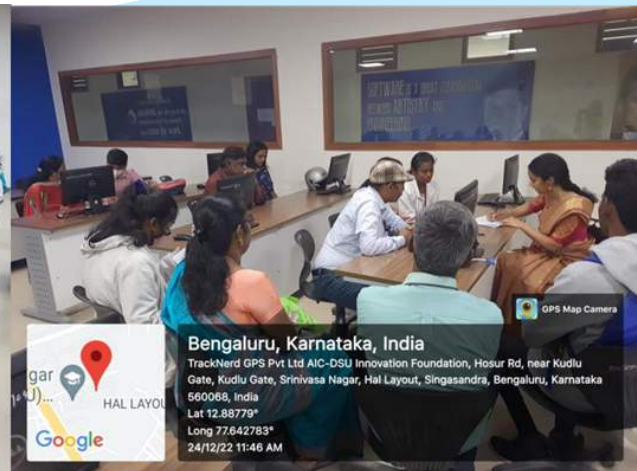
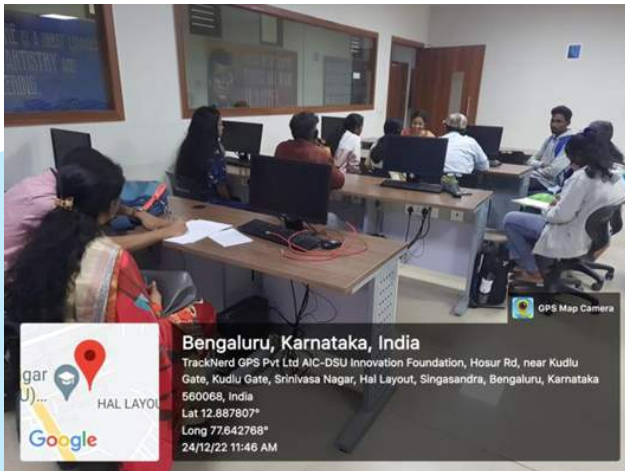
Career Labs Session

AICTE-career labs a session on successful career planning, higher education & technical profile building by career labs was organized on 7th of December 2022 for the 5th sem students of CST department. Over 30 students participated and gained information regarding preparation on the career needs.



Parent-Teacher Meeting

Computer Science and Technology department organized Parent-Teacher Meeting (PTM) on 24th December 2022.



Staff Achievements

Dr. M. Shahina Parveen
Professor & Chairperson



Dr. M. Shahina Parveen, Prof. Baskar Venugopalan, Prof. Ramandeep Kaur, Prof. Swetha Patil, Prof. Suparna published a patent on "**S system and method for enabling business application, saas permanence, SMB segments**" Application number 20224107674.

Dr. M. Shahina Parveen, Prof. Baskar Venugopalan, Prof. Ramandeep Kaur, Prof. Swetha Patil, Prof. Suparna published a patent on "**A system and method for enabling freemium services to free services**" 202241076745.

Prof. M. Chithambarathanu
Assistant Professor



Prof. M. Chithambarathanu, Dr. M. Shahina Parveen published a patent titled (202241068192) "**Detection and Classification of machine anomalies using Convolutional Neural Network**".

Prof. M. Chithambarathanu, published a book titled "**Theory of Computation**" in Scientific International Publishing House (SIPH) [ISBN NO: 978-93-5625-560-9]

Staff Achievements



Prof. Ramandeep Kaur
Assistant Professor

Prof. Ramandeep Kaur, Dr. Revathy published a paper titled "**Computing: Types, Detection and Mitigation Schemes**" in **International Conference on EAI ICISML 2022** during December 16 and 17, 2022, Hyderabad.



Prof. Swetha Patil
Assistant Professor

Prof. Swetha Patil, Prof. Suparna, Prof. Dharani published a paper titled "**Puzzle Optimization Algorithm based Weighted Feature Selection for Identification of Rice Leaf Disease through Thermal Images**" in **International Conference on IEEE - STCR 2022** during December 10 and 11, 2022, Tamilnadu.

Student Achievements

- 1) **Keerthi A Reddy, Shreyas B U**, published a patent on **“A System and Method for Enabling Logistics Tracker”** with application number 202241068773.
- 2) **Sohan R Vernekar, Sai Skanda Saravanan**, published a patent on **“A System and Method for Enabling Senior World”** with application number 202241068774.
- 3) **Adnan Md. Syed, Shashikala M S.**, published a patent on **“A System and Method for Enabling SAAS Analysis Tool for Big Data”** with application number 202241068432.
- 4) **Prajwal Mishra, Abhas Agnihotri**, published a patent on **“A System and Method for Enabling MOMIX Platform”** with application number 202241068431.
- 5) **Tharun Ganesh Naidu, Deepak Boppana Giri, Mucharla Nikhil Guptha**, published a patent on **“A System and Method for Enabling Arthritis Information Platform”** with application number 202241068433.
- 6) **Dhanush S, Bhoomika** published a patent on **“A System and Method for Enabling Upskilling Platform”** with application number 202241068048.
- 7) **R Punith Raj, Nihal Prasad R B**, published a patent on **“A System and Method for Enabling Agri Commerce”** with application number 202241068049.
- 8) **Sarah Catherine, Poornashree** published a patent on **“A System and Method for Enabling Memory Triggering AR/VR”** with application number 202241068028.
- 9) **Daksha, Hemalatha, Meghana** published a patent on **“A System and Method for Enabling Hassel Free Senior Assistance”** with application number 202241068030.
- 10) **Mohith, Vinay** published a patent on **“A System and Method for Enabling Funding Community for Farmers”** with application number 202241068034.



Department of Computer Science & Engineering

Hands-on Workshop

The Ganakanveshana Club of the Department of Computer Science and Engineering conducted One Day **Hands-on Workshop** on **"Application Development using Spring Boot"** on the 03rd of December 2022. The workshop was organized by Dr. Savitha Hiremath, Associate Professor, Prof. Shweta G S, Assistant Professor, and Prof. Nandini K, Assistant Professor, CSE.



ALUMNI TALK

The Department of Computer Science and Engineering, under the Alumni Talk Series conducted its first on the topic **"How Engineering is not just a degree but rather a transition of mindset"** on the 3rd of December 2022. The event was organized by Prof. Rashmi Mothkur, Assistant Professor (CSE), and Prof. Reshma B, Assistant Professor (CSE).

The resource Person for this talk was Miss. Varsha Revanur, Product Manager in SIXT Research and Development, Bangalore from the CSE batch of 2016. Topics covered by the speaker were - 'How 4 years evolves your thinking to tackle not just coding problems but also your approaches to solve every day real world problems', 'The various departments/roles of a corporate office', 'The importance of self-motivation in the journey to get your dream job'.

Hands-on Workshop on Business Intelligence Tools

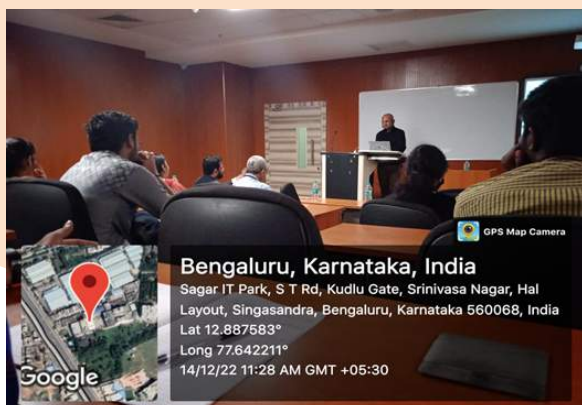


The department of Computer Science and Engineering conducted a 3-day **Hands-on Workshop** on "**Business Intelligence Tools**" from 9th to 11th December 2022. The workshop was organized by Dr. Sindhu P Menon, Associate Professor, Prof. Kalpana B N, Assistant Professor, and Prof. Ankita Singhai, Assistant Professor, CSE.



Seminar on Satellite Image Processing

The Department of Computer Science and Engineering conducted a seminar on "EARTH OBSERVATION SATELLITE IMAGE PROCESSING" on 14th December 2022.



The event was organized by Dr. Rajesh TM, Associate Professor, Dr. Tina Babu, Assistant Professor, Prof. Nandini K, Assistant Professor, CSE. Dr. P S Diwakar, ISRO Chair, Professor, IAS was the resource person of the event.

Full Stack Development Coding Challenge

Department of Computer Science & Engineering under FSD Club conducted coding challenge for "Full Stack Development" on 24th December 2022. This was exclusively organized for students of third semester from Dept. of CSE. The event was organized by Prof. Gousia Thahniyath, Prof Chhaya S Dule, Dr. Santhosh Kumar, Prof. Meghana G, Prof. Poojashree, Prof. Sindhu N, Prof. Amruta B.



First Prize in Development round is given to Ganesh, Amar Khan, Patel Mohammad, Second Prize is given to Sohana R, Akshaya B, Nanditha N, Niharika R



Third prize is given to Pragati P Kamarla, Nuthan B, Pavananda K S, M J Ankitha Koushik. Treasurer Hunt prize is given to Ekta Ghosh, Deepti Gurjar, Divyanka Jain Singhvi, Kavın Adarsh.

Visit to Gandhi Krishi Vigyan Kendra (GKVK)

Third year B Tech (CSE) students Kavya M Badiger, Chandana C P, Chethana P, Divya, together with their special topic supervisor, Dr. Basavaraj N Hiremath, Professor (CSE) visited the GKVK University campus on December 29, 2022, to have a better understanding of field data gathering in the plant house.



Visit to CDSIMER campus

Computer Science and Engineering final Year students Aishwarya Gangyada, Deeksha Y D, Manjari U, Meghana G, Ritika G M, Sathvika Patil proposing a health care application project employing artificial intelligence techniques under the supervision of Dr. Basavaraj N. Hiremath Professor, CSE. For taking healthcare specialists suggestion student visited CDSIMER campus on December 21st, 2022 at Dr. Shiva Murthy's invitation, for a meeting to understand the domain knowledge with the physicians.



Parent-Teacher Meeting

Computer Science and Engineering department organized Parent-Teacher Meeting (PTM) for 5th semester on 10th December 2022.



Student Achievements

Ms. Bhagyalaxmi N Kulkarni, 5th semester CSE student secured first place in Paper presentation competition in the event ADVITIYA - 22, a Two-Day National Level Student's Technical Fest, organized by K.L.E. Institute of Technology, Hubballi, Karnataka from 22nd December to 23rd December 2022. She presented paper on Website Blocker Using Python under the supervision of Dr Kiran B Malagi, Chairman & Professor, Cyber Security and received a cash prize of Rs. 5000/.





**Department of Computer
Science & Engineering**
(Artificial Intelligence and Machine Learning)

TRIVIA - 22

The students of 3rd Semester AIML on behalf of the DSU X Tempete Club – Department club conducted a quiz competition “**TRIVIA 22**” for First year students. 18 teams with a total of 54 students participated in the competition. The competition started with an introductory speech by the department chairperson Dr. Jayavrinda V.



Staff Achievements

1) Dr. Monika Goyal reviewed papers in All India Council for Technical Education (AICTE) Sponsored and scopus indexed International Conference ICETE 2023 organized by SKIT, MANAGEMENT & GRAMOTHAN, JAIPUR, INDIA.

2) Dr. Monika Goyal reviewed papers in All India Council for Technical Education (AICTE) Sponsored and scopus indexed INTERNATIONAL Journal JDMSCSP22.

3) Dr. Jayavrinda V was a reviewer for IEEE CENTCON conducted by DSU.

Student Achievements

1) Harsha and Haarika have presented the paper titled "**Merging the merits of Quantum Mechanics and Machine learning**" at the National student Symposium on physics (NSSP-2022) held during 21-23rd December 2022.

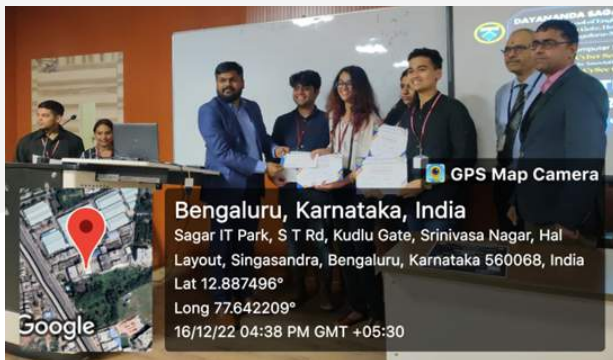


Department of Computer Science & Engineering

(Cyber Security)

Ideathon for First Year Students

The department of Computer Science and Engineering (Cyber Security) organized an "Ideathon" for first year students, on December 16th, 2022. Totally 34 teams registered and presented their ideas for the problem statements provided, related to cyber security domain. Eight ideas were selected for second round. Four teams were given with the cash prizes.



Computer and Networking Hardware Exhibition

On the eve of Charles Babbage Birth Anniversary, on December 26th, 2022, the Department of Computer Science and Engineering (cyber security) organized an event "**TechNite-Computer and Networking Hardware Exhibition**" for first-year students and a "Quiz competition" for first-year Computer Science and Engineering (cyber security) students.

Dr Udaya Kumar Reddy KR, Dean, SoE, inaugurated the event. Students from the Computer Science and Engineering (Cyber Security) department, explained the history and demonstrated the working principle of the various Computer and Networking hardware components.



Staff Achievements

1) Prof. Manjula M successfully completed the NPTEL online workshop on Java Programming conducted by Prof. Neminath Hubballi, IIT Indore on 6-10-2022.



Department of Computer Science & Engineering

(Data Science)

“Young India- Ideathon-2022”

The Data Science @DSU club, Department of Computer Science Engineering (Data Science) and CSI has successfully organized “**Young India-Ideathon 2022**”. Dr Rajeev Airani explained the evaluation criteria and Presentation guidelines to the students. The evaluation was done by judges including Mr Vikas Bharti, Dr. Rajeev Airani & Dr. Shaila S G.



Knowledge Discovery Models using R and WEKA

The Data Science @DSU club, Department of Computer Science Engineering (Data Science) and CSI has successfully organized a value-added course on “**Implementation of Data Science Applications using R and Python**”. The targeted audience were 3rd and 5th semester students. Around 30+ students participated in the Value-added course.



Staff Achievements

1) **Prof. Shivamma D** has attended a Faculty Enrichment Program organized by LTI Mindtree, Bangalore on 13th December, 2022.

2) **Monish L, Shaila SG, Shivamma D, Sumana SG**, won the **BEST PAPER AWARD** for presenting a paper "Rainfall forecasting using machine learning techniques", in International Conference on Applications of Machine Intelligence and Data Analytics 2022, ICAMIDA 2022, Springer held on 22-24 December, 2022, MGM University.

3) **Rajesh TM, Renuka Devi MN, Shaila SG, Cauveri Raju**, won the **BEST PAPER AWARD** for presenting a paper "A novel framework for grading of Heart attack", in International Conference on Applications of Machine Intelligence and Data Analytics 2022, ICAMIDA 2022, Springer held on 22-24 December, 2022, MGM University.

Student Achievements

1) **Badigi Udith Reddy, Srinivas K, Abhishek A**, 3rd Semester have participated in the **"Ideastrom at Quantum 22"** organized by New Horizon College of Engineering on 8th December 2022 - 10th December 2022.

2) **Shilpa Singh, Shreya Sridharan, Shaikh Aaman and Roopak Raghu**, students of 1st Semester have won the 1st place in the **"Young India-Ideathon 2022"** organized by the Data Science @DSU club, Department of Computer Science and Engineering (Data Science) in the association with CSI on 10th December, 2022.

3) **Vinuraj Vamsi, Dhruvi Purushotham, Vishal Binil and Soundaraya Jois**, students of 1st Semester have won the 2nd place in the **"Young India-Ideathon 2022"** organized by the Data Science @DSU club, Department of Computer Science and Engineering (Data Science) in the association with CSI on 10th December, 2022.

4) **Adeesh, Anshul, Anusha and Amrita**, students of 1st Semester have won the 3rd place in the **"Young India-Ideathon 2022"** organized by the Data Science @DSU club, Department of Computer Science and Engineering (Data Science) in the association with CSI on 10th December, 2022.

5) **Vinuraj Vamsi, Vishal Binil and Vishanth Rakshitj**, students of 1st Semester have won the 3rd place in the **"Trivia-22"** quiz competition organised by the DSU X TEMPETE an AI&ML Department Club, Department of Computer Science and Engineering (AI/ML) on 15th December, 2022.



Department of Electronics & Communication Engineering

ROBO WARS

ELECTROBLITZ Club Under the Department of Electronics and Communication Engineering of Dayananda Sagar University conducted the event 'ROBO WARS' on 21st December 2022 from the 1:30PM onwards under the coordination of Dr. Gayathri K M and Prof. Kanmani B S. About 100 students had registered in teams of 5 members.



Second IEEE International Conference on Disruptive Technologies for Multidisciplinary Research and Applications (CENTCON 2022)

The Department of Electronics and Communication Engineering, Dayananda Sagar University, Bengaluru organized the Second IEEE International Conference on Disruptive Technologies for Multidisciplinary Research and Applications from 22nd December, 2022 to 24th December, 2022. This conference was a forum for presenting of ideas, learning new technologies, building networks, learning the unlearned and contributing to the body of knowledge.



This flagship conference featured accomplished keynote speakers such as Dr V K Hariharan, Former Deputy Director, UR Rao Satellite Centre, ISRO, Bengaluru who gave insight about the journey of ISRO and its accomplishments ; Dr. Aloknath De Cyber-Physical Systems Expert, Tech-Biz Consulting for Innovation and Impact who briefed about all the new technologies which is taking over the world like IOT, 5G, blockchain technologies and S D Sudarsan, Executive Director at CDAC. The conference was technically Co-Sponsored by IEEE Bangalore Section. The proceeding of the conference will be available on IEEE Xplore.



Department of Aerospace Engineering

Celebration of International Civil Aviation Day

International civil aviation day is globally celebrated on 7 December of every year to generate awareness on the importance of Aviation and International Air Travel in any Nation's social and economic development by fostering global connectivity. In this regard, the Department of Aerospace Engineering organized this event, marked by Technical Quiz, Model Building, Videography, Flight Simulator Challenge, Technical Debate based on Civil Aviation Day theme. This event was a part of an interactive technical club activity organized by the students of 3rd semester organized. The Alatus club thanks all the club members for their support in the smooth conduct of this event, Special thanks to Prof. Sripad, Prof. Bharat, Prof. Srinath. Students Mr Abrar, Mr. Lohit and all the student coordinators supported very well to make the event successful.



Participation in Aeromodelling Competition held at IIT Bombay

The final year students of the Department represented Dayananda Sagar University in the competition held in IIT Bombay during Dec 17-19. The team members consisting of Mr Harsh, Mr Hrithik, Mr Sourabh and Miss Aishwarya actively participated in this competition on design and fabrication of Remotely Controlled aircraft. It provided a great platform to gain relevant technical exposure and interactions with students from other Institutions. The team members would like to thank Dr. BVN Ramakumar, Prof Suryanarayana and other Faculties of the Department for their support and guidance.



Staff Achievements

1) D B Singh, Gireesh Yanamashetti, G K Suryanarayana and G Jagadeesh: Unsteady phenomena over the payload region of a launch vehicle under accelerating transonic flow, Proceedings of the 9th International and 49th National Conference on Fluid Mechanics and Fluid Power (FMFP 2022-2389) held during Dec. 14-16, 2022 at IIT Roorkee, India.

2) Anju Sharma, D B Singh, G K Suryanarayana: Control of back-pressure during wind tunnel testing of a two-dimensional ramjet air-intake model, Journal of Aerospace Sciences and Technologies, Vol. 74, No. 4, pp. 278-286.

3) A patent application titled "An efficient heat transfer device" was filed for an invention reported by **Prof G K Suryanarayana**.



Department of Mechanical Engineering

Industrial Visit to Raymond's

Industrial visit to Silver Spark Apparel LTD (Raymond) where 43 students of 5th Sem Mechanical Engineering, 2 Faculties and 2 Technical Assistant. Resource Person: Mr. Nitin Wanker (Plant Head), Prarthana K R (HR). Conducted by: Dr. Manish Kumar Mishra (Assistant Professor, Mech. Engg.), Dr. Sarvanabhavan (Associate Professor, Mech. Engg.)



Interaction session of IISc & DSU Research Scholars

The Dept. of Mechanical Engineering, DSU organized an interaction session for the Research Scholars on 27-12-2022. Eminent professors & Research Scholars from Indian Institute of Science (IISc) shared their research experiences. Prof. Yella Reddy, Former Professor -Vemana Institute of Technology/Acharya Institute of Technology/ UVCE, Bengaluru and Prof. K. R. Y. Simha, Professor - Dept. of Mechanical Engineering, IISc addressed the research scholars and shared their insights on how to successfully carry out research.



Staff Achievements

Mr. Ravitej Y P (Asst.Prof), Dr. Ramohan B(Prof), and Mr. Sandeep (Asst.Prof) presented two papers at IIT-Hyderabad in an international conference named SICE 2022. The papers submitted are the essence of the work performed in a project funded by Dassault Systems, India. Both papers aim is to fabricate automotive products from natural wastes. Out of the 2 Papers, **Paper titled: A Study of Delamination in a Natural Fiber Reinforced Composite Structure** was awarded the best paper award in the conference. Prof.Anupam Saxena, Professor, IIT Kanpur was the chair for the presentation.

InSIS
Indian Structural Integrity Society



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Best Oral Presentations SICE 2022

CATEGORY	AUTHORS	TITLE	PAPER ID
Composites	Shubha Javagal, Sandeep M.J., Rammohan Bhanumurthy , Ravitej Y.P. , Shashidhara L.C	A Study of Delamination in a Natural Fibre Reinforced Composite Structure	3936



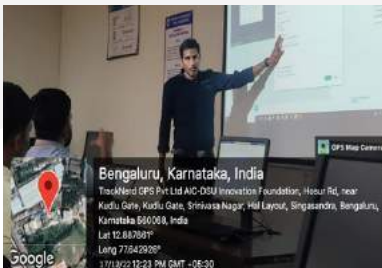
Department of Computer Applications

Project Expo



Workshop

The Department of Computer Applications organized a three days' **Workshop on Business Intelligence Tools from 16-12-2022 to 18-12-2022** organized by Prof. Pavithra.K. The workshop benefited around 40 participants from MCA. The workshop covered various areas of Business tools and techniques for solving data analytics problems. Business Intelligence tools like Power Bi, Tableau Business Intelligence Software was explained by resource person Mr. Venkat Durga Sriram, Application Developer Senior Data Analyst, Accenture Solution Pvt. Ltd, Bangalore. The resource person addressed Doubts raised by participants, the email id of the resource person was shared with the participants so that they can directly mail their doubts to the resource person.



Staff Achievements

1) **Dr. Smrity Prasad** has published a book “**New Foundation of Artificial Intelligence**”, ISBN 978-93-5515-510-8 in September 2022. This book covers concepts of AI and discuss ethical and sustainable human and AI technology.



Department of Basic Sciences

Staff Achievements

1) Prof. PC Deshmukh delivered Talk on “**Entanglement, Reality, and Quantum Computation**”, at College of Pharmacy, Dayananda Sagar University, Bengaluru (2nd December, 2022) during the Lecture Series on Nobel Prizes-2022.

2) Prof. PC Deshmukh delivered Talk on “**Teleportation and Quantum Computation - Physics Nobel Prize 2022**”, at 9th Indian Association of Physics Teachers (IAPT), National Students Symposium on Physics (NSSP) at National College Campus, Jayanagar, Bengaluru on 21st December 2022, Wednesday and B V Jagadeesh Science Centre, The National College Campus, Jayanagar, Bangalore.

3) Dr. Suresh Pittala got a DST-SERB Sponsored project worth of 50 Lakhs for the 3 years duration. The title of the project, “**Magnetolectric spin orbit (MESO) based logic for the beyond CMOS computing applications**”.

4) Dr. Suresh Pittala, attended two-day online workshop on “**2D Semiconductor Nanodevices & Simulations**” at the Centre for Nanotechnology, IIT Guwahati to 08-12-2022 and 10-12-2022.

5) Dr. Ravinder Singh Kuntal, published a patent “**A SYSTEM FOR CALCULATING THE LOWEST-COST FEED RATION FOR PREGNANT DAIRY COWS**”.

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