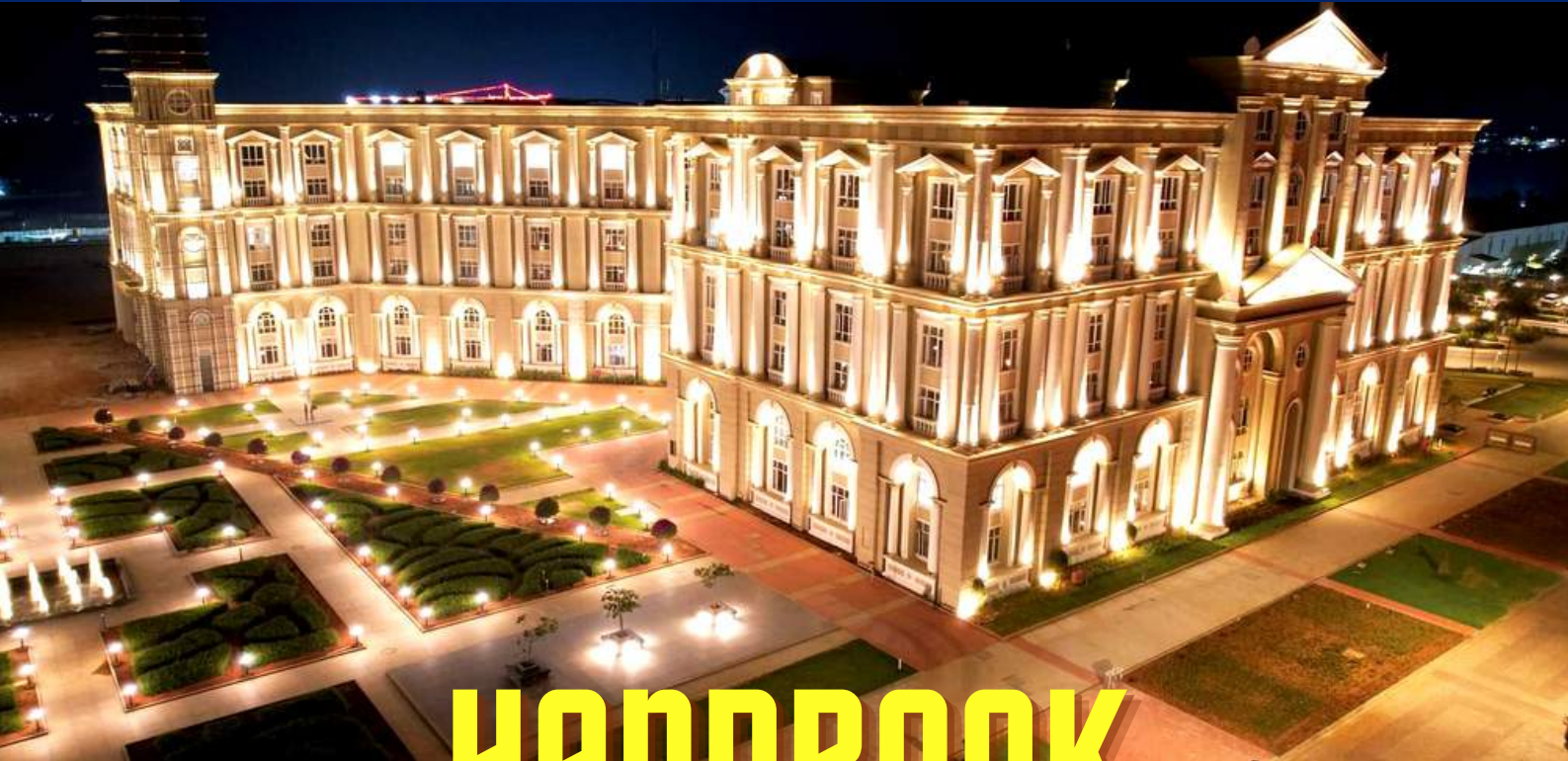




**SCHOOL OF
ENGINEERING**

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
(DATA SCIENCE)**



HANDBOOK 2020-2023



**DAYANANDA SAGAR
UNIVERSITY**

**Dayananda Sagar University, Devarakagalahalli, Harohalli,
Kanakapura Road, Ramanagara Dt.,
Bengaluru – 562 112**

VISION AND MISSION
DSU**Vision**

To be a centre of excellence in education, research & training, innovation & entrepreneurship and to produce citizens with exceptional leadership qualities to serve national and global needs.

Mission

To achieve our objectives in an environment that enhances creativity, innovation and scholarly pursuits while adhering to our vision

VISION AND MISSION
SOE**Vision**

To transform life through Excellence and Innovation 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.



VISION AND MISSION**Data
Science****Vision**

To endow the succeeding generation of engineers for a data-centric world by expanding their capacity to contribute in the field of data science by providing an absolute resolution in social aspects

Mission

To develop the Department of CSE (Data Science) as a Center of Excellence in Data Science domain by imparting Quality Education and Research to the students. To motivate the students to be ethical data science practitioners and innovators in data-driven global society

PROGRAM EDUCATIONAL OBJECTIVES (PEO'S)

- PEO1. Possess confident professional Data Science skills to build powerful knowledge model to generate actionable insights, necessary for making data-driven decisions.
- PEO2. Apply the structured statistical, mathematical methodology and visualization tools to process massive amount of data to identify hidden patterns to make predictions considering realistic constraints.
- PEO3. Knowledge delivery in terms of analytics, visualization, design, research and development, product implementation, verification and validation, optimization in the field of Data Science by using modern tools and techniques.
- PEO4. Problem solving for societal aspects, carrier enhancement by altering professional certifications, and seeking higher education

PROGRAMME OUTCOME (PO'S)

- PO1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- PO2. Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- PO3. Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- PO4. Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- PO5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- PO6. The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- PO7. Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- PO8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- PO9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- PO10. Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- PO11. Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- PO12. Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAM SPECIFIC OUTCOMES (PSO'S)

- PSO1. Inculcate the principles of Data Science, Data Management, Data Security and Visualization for building intelligent predictive
- PSO2. Applying the knowledge of analytics, statistics and Machine Learning concepts to solve real world business problems

DEAN'S MESSAGE



Dr. Udaya Kumar Reddy K R
Dean – School of Engineering
Professor, Dept. of CSE
DSU

I am delighted that the Department of Computer Science and Engineering (Data Science) is bringing out the handbook that can provide wonderful insights for students and faculty fraternity.

A lot has been happening in the school of computing sciences over the years, and one of the significant changes involves in this handbook.

Our graduate students are doing amazing things in many different areas in different ways. In the current handbook, you'll meet some remarkable students and faculty who are making a difference in the technical aspects and otherwise. We are hoping to build this endowment with your support, to afford even more opportunities for students to take part in this important component of their graduate education.

I hope this handbook provides the reader a wonderful insights and I thank the editorial team for their wonderful effort in bringing out this handbook. Wish you all the best.

CHAIRPERSON'S MESSAGE



Dr. Shaila S G
Professor & Chairperson
Department of CSE
(Data Science) SOE,DSU

Welcome to the Department of Computer Science & Engineering (Data Science), School of Engineering at Dayananda Sagar University!

It gives me immense pleasure and pride to introduce the Dept. of Computer Science & Engineering (Data Science). This Program is designed to meet the requirements of various job roles in Data Science (Data Scientist, Data Analyst, Data Manager, etc.). The program aims to bridge the Industry gaps in terms of Research and Development using cutting edge technologies.

Faculty members in the program are experts and are carrying out active research in various domains of Data Science. Our program looks forward to contributing technologically in solving the real world challenges in association with the students.

Thank you for visiting us!

ABOUT THE DEPARTMENT

B.Tech CSE (Data Science) is a 4-year undergraduate degree programme. Data Science teaches the students how to combine Machine Learning techniques, algorithms, tools, business acumen and mathematics and apply on raw data to extract insight information from it. In short, technology algorithm development and data inference are blended together to solve complex problems analytically in Data Science.

Throughout the entire duration of the programme, the students are taught how to amalgamate business knowledge, tools and statistics to generate business value in creative ways.

The four-year undergraduate curriculum includes a detailed delivery of Basic Sciences, Mathematical Foundations, Statistical Foundations, Artificial Intelligence, Machine Learning, Data Science, Deep Learning, and Data Visualization.

The curriculum imparts 21st century skills having the following components: Liberal education aspects for all round development, courses that trigger new age skills, project based learning, special topics (hands-on sessions on multiple topics with mentoring from expert), option for MOOC, UG Research Project/Product Development/Internships.

The curriculum focuses on Liberal Art Courses, Foundation Courses, Professional Courses, and Electives that helps them build expertise in some specialized areas. Curriculum developed also emphasis on Design oriented thinking, Communication, Collaboration and Creativity right from 1st year.

A degree in Computer Science (Data Science) can lead to the following job roles in a variety of industries such as Retail, Finance, E-commerce, Healthcare, IT services:

- Data Scientist
- Data Analyst
- Business Analyst
- Data Engineer
- Senior Data Engineer
- Senior Data Analyst
- Data Director

FACULTY LIST

NAME OF THE FACULTY	DESIGNATION
Dr. Shaila S G	Chairperson and Professor
Dr. Kakoli Bora	Associate Professor
Prof. Shivamma D	Assistant Professor
Prof. Monish L	Assistant Professor
Prof. Sindhu A	Assistant Professor
Prof. Vaishali Bagewadikar	Assistant Professor
Prof. Shahwar Ara Kamal S	Assistant Professor

SUPPORTING STAFF

NAME	DESIGNATION
Divya R	Teaching Assistant/Lab Instructor
Praveen R S	Office Assistant

STUDENT INTAKE DETAILS

Academic Year	Intake	Admission Statistics
2020-2024	60	48
2021-2025	60	56
2022-2026	60	57
2023-2027	120	95+

CURRICULUM STRUCTURE

Year 1

Gain foundational understanding of mathematical concepts, scientific principles, and fundamental principles and Statistical Foundations of Data science.

Year 2

Explore the intricacies of the Data Science discipline through a well-rounded curriculum that includes a balanced mix of core courses

Year 3

Students have the option to select from a diverse range of elective focus areas, allowing them to delve deeper and gain specialized expertise in their chosen field

Year 4

Apply and showcase your skills through real-world professional internships and a culminating dissertation project

TEACHING & LEARNING PROCESS

UNIQUE PEDAGOGY

- Teaching Pedagogy
- Project Based Teaching and learning
- Training on current Trending Tools
- Incorporated LMS

ASSESSMENT METHODS

- Problem solving assignments
- Seminar
- Reflection Notes on Industry Visits/Workshop/Webinar
- Computer Based QUIZ
- Open Book Test
- Case Studies
- Tech-Talks
- Codethon's/Hackathons/Ideathons

EMPOWERING ACTIVITIES

For SLOW LEARNERS -

- Faculty Mentors
- Remedial classes
- Assignments
- Improvement tests

For ADVANCED LEARNERS -

- Academic competitions
- Research Projects
- Conferences
- Workshops

For ALL STUDENTS -

- Internship in Industry
- Summer research internships

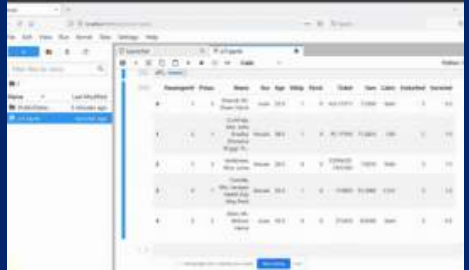
REMEDIAL CLASSES FOR - 4TH SEM



PROJECT EXPO - 4TH AND 6TH SEMESTER



EVENTS

NAME OF THE EVENT	CAPTURED IMAGES
5 DAYS VALUE-ADDED COURSE ON DATA SCIENCE SKILLS ON DIGITAL TRIBE 24th - 31st January 2022 Resource Person: In House Faculties	
WEBINAR ON "PRIMER ON DATA SCIENCE TOOLS AND TECHNIQUES" 09th April, 2022. Resource Person: Mr. Ashish Jain Data Scientist @ Infosys Ltd.	
DSU E-SPORTS 23rd April, 2022 by RUSHByKIRA.com	
WEBINAR ON "DATA ANALYTICS IN HEALTHCARE" 23rd April, 2022 Resource Person: Dr. Eesha Sharma Assistant Professor, CAP NIMHANS, Bengaluru	
COMPUTER AWARENESS PROGRAM UNDER NSS ACTIVITY on 22nd July 2022 for the Government School students of DSU adopted village.	

EVENTS

NAME OF THE EVENT	CAPTURED IMAGES
VALUE ADDED COURSE ON "MACHINE LEARNING WITH HANDS ON (TENSORFLOW/PYTHON)" 8th-12th August 2022 Resource Person: In House Faculties	
ONE - WEEK FDP ON "MACHINE LEARNING FOR REAL TIME APPLICATIONS" 23rd August to 27th August 2022 Resource Person: In House Faculties	
WEBINAR ON "DATA PREPARATION FOR DATA SCIENCE WORKFLOWS" 10th September 2022. Resource Person: Mr. Vinod Senior Consultant, EY GDS, Bangalore	
ENGINEER'S DAY CELEBRATION 15th September 2022. Resource Person: Dr. Lakshmi Jagannathan, CEO, DERBI & Mr. Abhinav Varma G, Director, Exalt Design Engineers Pvt. Ltd.	

EVENTS

NAME OF THE EVENT	CAPTURED IMAGES
"SARASWATHI & AYUDHA PUJA" 30 September, 2022	
CODEATHON-C CONTEST 24th September 2022. Resource Person: In House Students	
LAUNCHED 1ST DATA SCIENCE NEWSLETTER "DATA GLIMPSE" (VOLUME 1 ISSUE 1) 5th September, 2022 on the occasion of Teacher's Day, Chief Guest: Dr. S. S. Prabhu, Former Professor, IIT, Kanpur and IIIT, Bangalore & Dr. KNB Murthy, the Vice Chancellor of DSU.	
"ORGAN DONATION AWARENESS AND PLEDGE - NSS ACTIVITY" 28th September, 2022. Keynote Speaker: Mr. M.K. Krishna, Founder President GGCC, Bangalore	

EVENTS

NAME OF THE EVENT	CAPTURED IMAGES
"DIYA DESIGNING COMPETITION" 21st October, 2022	
HANDS-ON WORKSHOP "DATA SCIENCE FOR DUMMIES" 22nd October 2022 Resource Person: Mr Ayush & Mr Sumit CanPe Solutions, Bengaluru	
INDUSTRY SUMMIT "BANGALORE TECH SUMMIT 2022" 17th November 2022,	
"YOUNG INDIA- IDEATHON-2022" 10th December 2022 Chief Guest: Mr. Vikas Bharti, Delivery Manager, Cardinal Health, Bangalore Judges: Mr. Vikas Bharti, Dr. Rajeev Airani & Dr. Shaila S G.	
VALUE ADDED COURSE ON "KNOWLEDGE DISCOVERY MODELS USING R AND PYTHON" 19th - 23rd December, 2022 Resource Person: In house faculties: Dr. Shaila S G & Dr. Rajeev Airani	

EVENTS

NAME OF THE EVENT	CAPTURED IMAGES
FACULTY ENRICHMENT PROGRAM ON "COGNIZANT DIGITAL NURTURE REVERENCE" by Cognizant, Bangalore on 10th January 2023.	
VALUE ADDED COURSE ON "RECENT ADVANCES IN DATA STRUCTURES FOR DATA SCIENCE APPLICATIONS" 11th January, 2023. Resource Person; In House Faculties	
A SESSION BY PLACEMENT CELL "CAMPUS TO CORPORATE FOR PRE FINAL YEAR" 7th February 2023. Resource Person: Vijay Kumar Deputy Director Training, Placement & Skill Development SOE. DSU	
TECH TALK ON "WEB 3.0 - INTERNET OF THE FUTURE" 10th February 2023 Resource Person: 1. Mr. Ashwin Prased, Tech Lead @FLAQ 2. Mr. Muaaz Khan, Operations Lead @FLAQ	
HANDS-ON WORKSHOP WITH TIPS AND TRICKS FOR COMPETITIVE CODING "CODEATHON C - 2023" 11th February, 2023 Resource Person: In-House Faculties and Student Coordinators	

EVENTS

NAME OF THE EVENT	CAPTURED IMAGES
WORKSHOP ON "REVOLUTIONARY DATA ANALYSIS AND PREDICTIVE POWER FOR BUSINESS WORLD Using Tableau and Power BI" 22nd February, 2023. Resource Person: Gauthami B E CTO and Co-founder - Cybersafe, Bangalore	
A QUIZ ON DATA SCIENCE APPLICATIONS AND ITS USE CASES "RAPID MINER COMBAT" 1st march, 2023	
INDUSTRY VISIT "ISRO-ISTRAC" 2nd March 2023 Resource Person: Mr B Sankar Madaswamy, Scientist/Engineer-SF, Manager	
A SESSION BY PLACEMENT CELL "CAMPUS TO CORPORATE" 1ST AND 2ND YEAR B.TECH STUDENTS 3rd March, 2023 Resource Person: Vijay Kumar Deputy Director Training, Placement & Skill Development SOE. DSU	
"WOMEN'S DAY CELEBRATION" 8th March, 2023	

EVENTS

NAME OF THE EVENT	CAPTURED IMAGES
WORKSHOP ON FRAMEWORKS FOR WEB DEVELOPMENT "WEB DEV" 21st March 2023 Resource Person: In-House Faculties and Student Coordinators	
A DEMO SESSION BY PLACEMENT CELL "NEOPAT PLATFORM" 28th March, 2023 Resource Person: Mr. Praneshwar L1 Member- Customer Success Team at iamneo.ai	
A SESSION BY PLACEMENT CELL "THE INFOSYS FINACLE CERTIFICATION PROGRAM" 29th March, 2023 Resource Person: Puneet Chhahira, Vice president & S Karthik V R, Business Manager at Infosys Finacle	
ALTAIR & RAPID MINER TOOLS, TRAINING AND CERTIFICATION 1ST FEBRUARY, 2023 TO 31ST MARCH 2023	
TECH TALK ON "UNLOCKING THE POTENTIAL OF CHAT GPT FOR DATA SCIENCE" 31st March 2023 Resource Person: Reshma R, Research SDE @ Microsoft Research, India	

EVENTS

NAME OF THE EVENT	CAPTURED IMAGES
Pre - Placement Training "Communication Skills" 06 April, 2023 Resource Person: Shashirekha, Placement and Skill development, Bangalore	 Bengaluru, Karnataka, India 16th Cross, 2nd Block, Banner Road, 103881 Campus Kudlu Gate, 1st Block Dayanand Nagar University campus, Kudlu Gate, Srinivasa Nagar, Hal Layout, Singasandra, Bengaluru, Karnataka 560068, India Lat 12.867469° Long 77.441634° 06/04/23 09:23 AM GMT +05:30
POTLUCK - "TASTY TREASURES" 12TH APRIL, 2023	 Bengaluru, Karnataka, India VJPR+XP4, Kudlu Gate, Srinivasa Nagar, Hal Layout, Singasandra, Bengaluru, Karnataka 560068, India Lat 12.867414° Long 77.441659° 12/04/23 01:47 PM GMT +05:30
"PRE - PLACEMENT TRAINING" 18TH APRIL, 2023 Resource Person: Raghavendra, CISCO, Bangalore	 Bengaluru, Karnataka, India 7th Main, Banner Rd, Kudlu Gate, Srinivasa Nagar, Hal Layout, Singasandra, Bengaluru, Karnataka 560068, India
MOTIVATIONAL TALK TRANSFORMING DREAMS INTO REALITY: THE ROADMAP TO SUCCESS" 12TH MAY, 2023 Keynote Speaker: Sri M K Krishna, Founder President, GGCC (Giant's Group of Garden City), Bangalore.	 Bengaluru, Karnataka, India 2nd Floor, 1st Block, Dayanand Nagar University Building, Hongasandra Village, Banner Road, Kudlu Gate, Srinivasa Nagar, Hal Layout, Singasandra, Bengaluru, Karnataka 560068, India Lat 12.867332° Long 77.441637° 12/05/23 11:18 AM GMT +05:30
PROJECT EXPO "MINDSPARK - 2023" TEAM OF TANGENTS 17th May, 2023 Chief Guest" Mr. Sunil Kumar - Director of operations & Mr. Dennis Kohl - CEO, Inheaden, Germany Expert Panel: Narasimha Sarovar, Global Senior Product Mar, Johnson Controls & Ashraff Sankanal, Senior Data Scientist, Altair, Bangalore.	 Bengaluru, Karnataka, India VJPR+XP4, Kudlu Gate, Srinivasa Nagar, Hal Layout, Sing Bengaluru, Karnataka 560068, India Lat 12.867366° Long 77.441602° 17/05/23 12:42 PM GMT +05:30

COLLABORATION / MOU'S

- ALTAIR UNIVERSITY

COURSES ENROLLED BY THE STUDENTS: 4

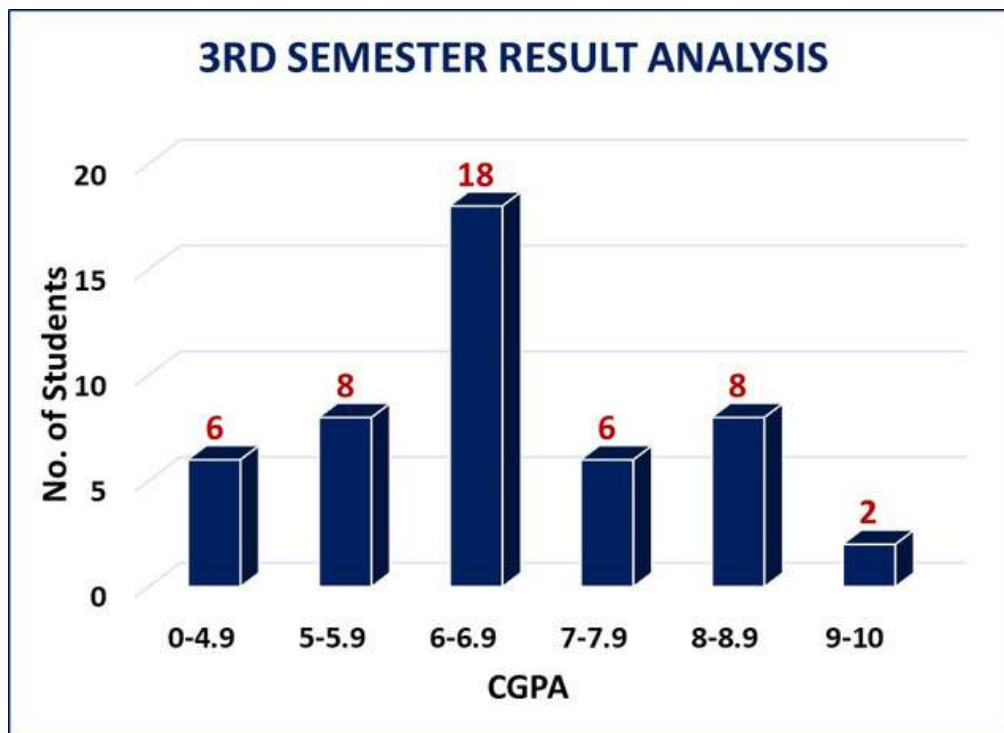
- Data Engineering Master (Rapid Miner Academy)
- Data Engineering Professional (Rapid Miner Academy)
- Applications and Use cases (Rapid Miner Academy)
- Data Analytics using knowledge Studio (Altair University)

SEMESTER	COURSE NAME	PLATFORM	NO OF STUDENTS AWARDED
4th Semester & 6th Semester	Data Engineering Professional Course and Certification	RapidMiner Studio [Altair University]	60
6th Semester	Data Engineering Master Course and Certification	RapidMiner Studio [Altair University]	40
6th Semester	Data Science Applications and Use Cases Professional Course and Certification	RapidMiner Studio [Altair University]	39 (Ongoing)
6th Semester	Data Modelling with Knowledge studio	Altair University	16 (Ongoing)

RESULT ANALYSIS

3RD SEMESTER TOPPERS (2020 BATCH)

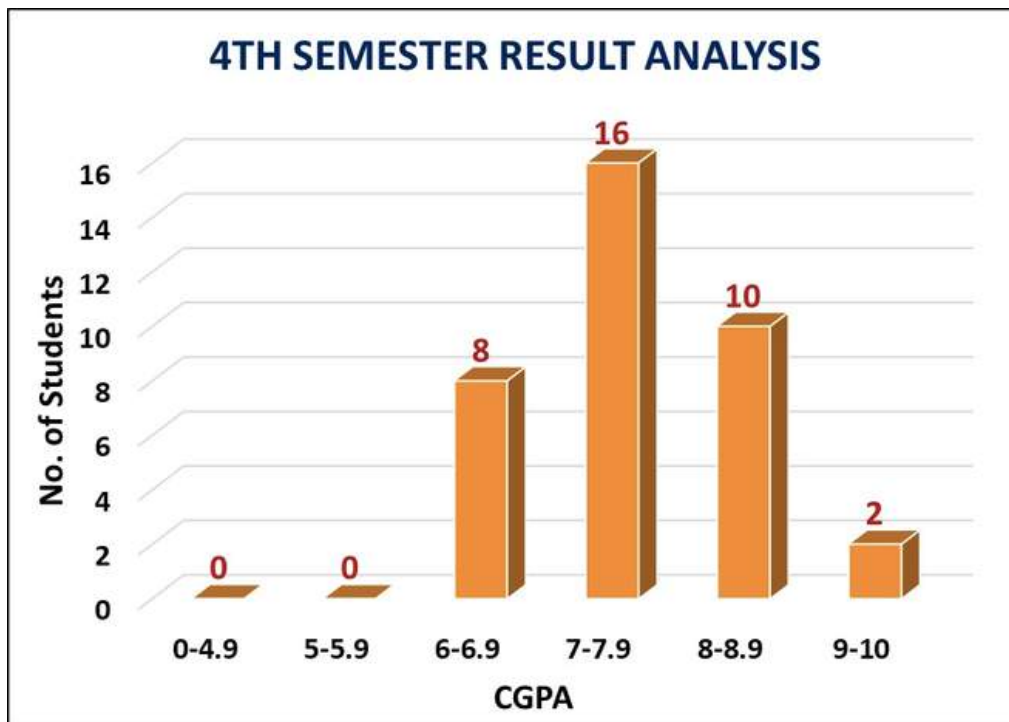
USN	Name	CGPA
ENG20DS0048	YASHNA KARKERA	9.33
ENG20DS0044	VEDANTH V BALIGA	9.26
ENG20DS0026	NANDINI HAZARIKA	8.82
ENG20DS0040	SUKRUTHA G	8.79
ENG20DS0015	DHANUSHA R	8.77



RESULT ANALYSIS

4TH SEMESTER TOPPERS (2020 BATCH)

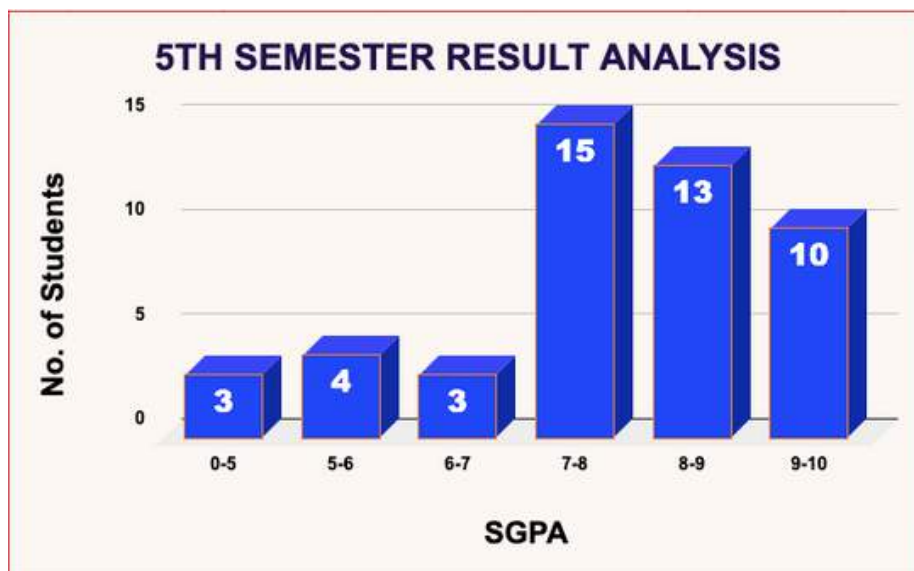
USN	Name	CGPA
ENG20DS0044	VEDANTH V BALIGA	9.31
ENG20DS0048	YASHNA KARKERA	9.23
ENG20DS0002	AABHIRUCHI SANJA	8.8
ENG20DS0026	NANDINI HAZARIKA	8.75
ENG20DS0040	SUKRUTHA G	8.73



RESULT ANALYSIS

5TH SEMESTER TOPPERS (2020 BATCH)

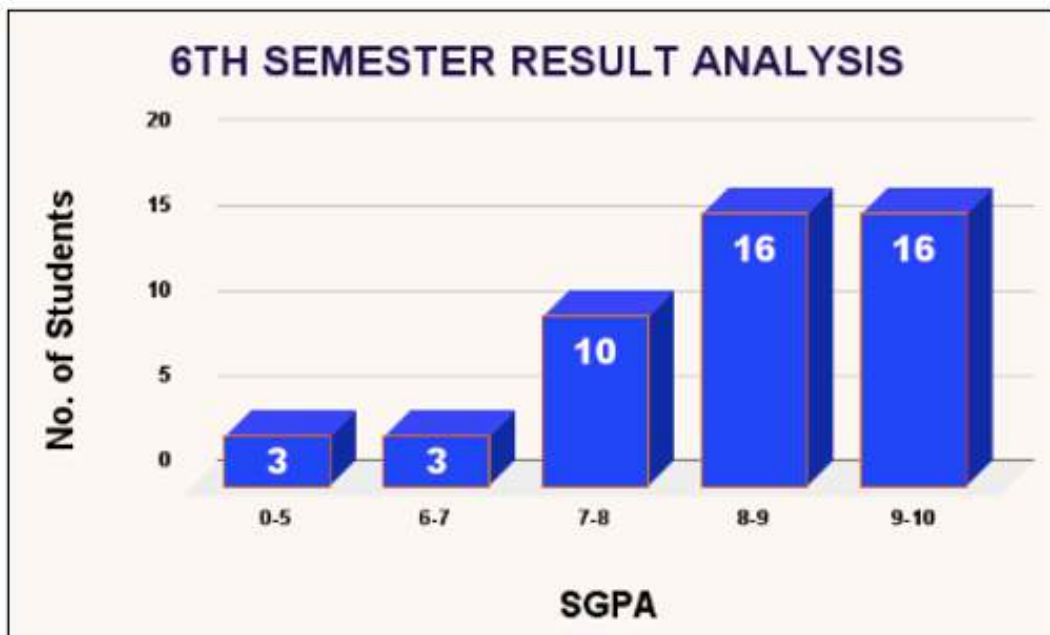
USN	NAME	SGPA
ENG20DS0002	ABHIRUCHI SANJAYKUMAR BHARAMBE	9.72
ENG20DS0044	VEDANTH V BALIGA	9.72
ENG20DS0048	YASHNA KARKERA	9.72
ENG20DS0030	PRANAV S S	9.44
ENG20DS0015	DHANUSHA R	9.4
ENG20DS0023	MANJU SWAROOP V	9.28
ENG20DS0022	M MADAN	9.2
ENG20DS0019	KEERTHANA HEBBAR R	9.16
ENG20DS0026	NANDINI HAZARIKA	9.08
ENG20DS0040	SUKRUTHA G	9



RESULT ANALYSIS

6TH SEMESTER RESULT ANALYSIS - 2020 BATCH

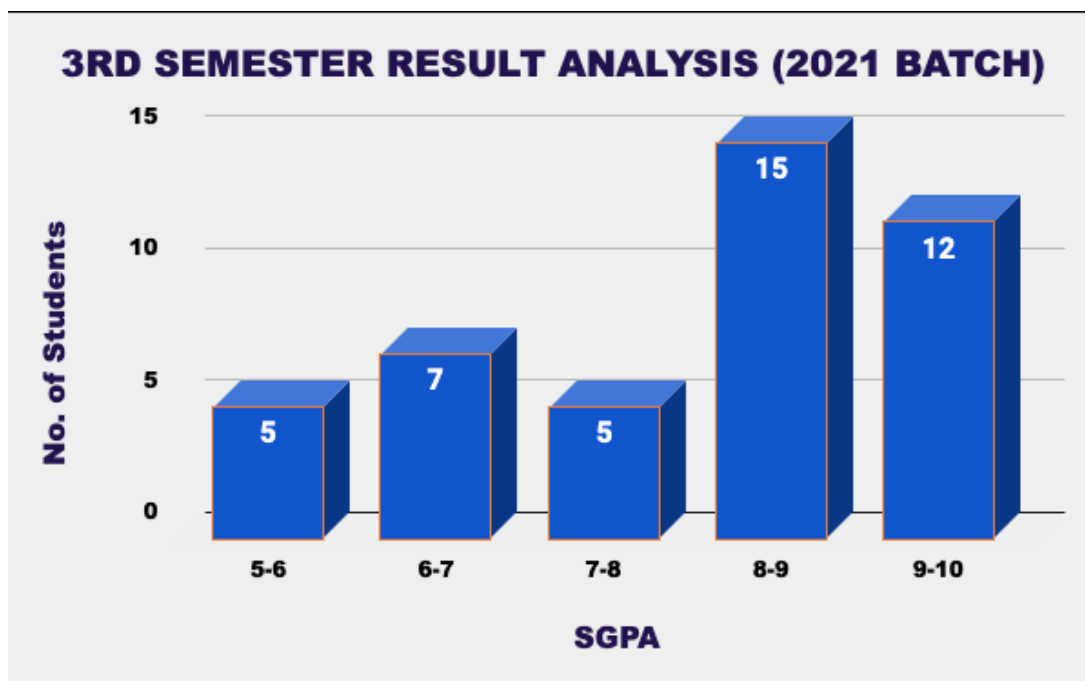
USN	NAME OF THE STUDENT	SGPA
ENG20DS0002	ABHIRUCHI SANJAYKUMAR BHARAMBE	10
ENG20DS0023	MANJU SWAROOP V	9.86
ENG20DS0048	YASHNA KARKERA	9.86
ENG20DS0015	DHANUSHA R	9.71
ENG20DS0026	NANDINI HAZARIKA	9.71
ENG20DS0037	SANJAY M	9.71
ENG20DS0022	M MADAN	9.67
ENG20DS0044	VEDANTH V BALIGA	9.57
ENG20DS0040	SUKRUTHA G	9.52
ENG20DS0018	K SAI PRADEEPTHI	9.43



RESULT ANALYSIS

3RD SEMESTER TOPPERS (2021 BATCH)

USN	NAME	SGPA
ENG21DS0002	ABHISHEK A	10
ENG21DS0006	AKSHAYA B	9.78
ENG21DS0020	GOLLA PUJARI SOWMYA	9.74
ENG21DS0003	ABHISHEK N	9.61
ENG21DS0046	V NIVAS REDDY	9.43
ENG21DS0035	SAMMANA BHAVANI PRASAD	9.35
ENG21DS0045	USHASHREE N	9.26
ENG21DS0014	CHAITHRA K	9.17
ENG21DS0044	THILAK R	9.13
ENG21DS0047	VINUTH GOWDA S	9.13

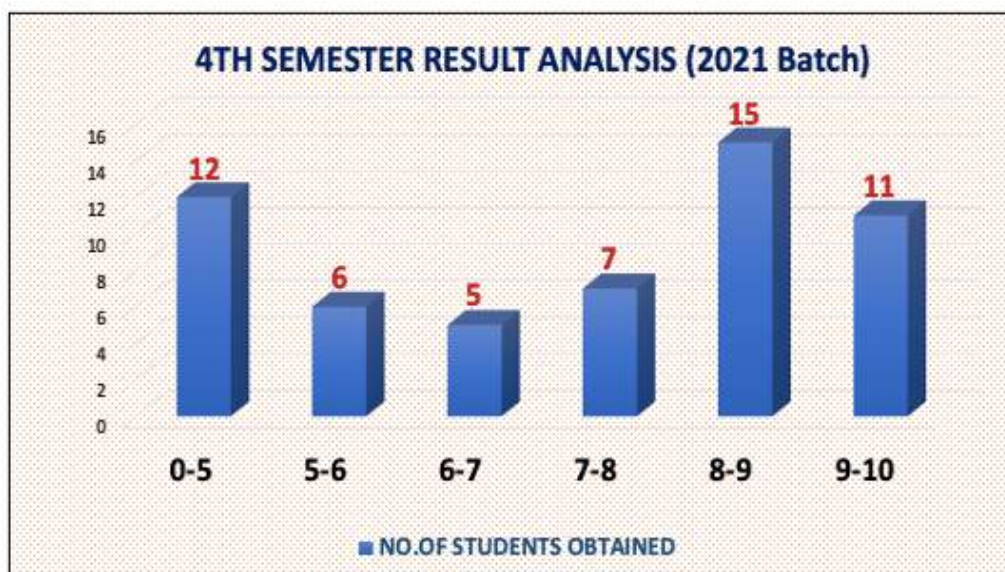


RESULT ANALYSIS

4TH SEMESTER TOPPERS (2021 BATCH)

USN	NAME	SGPA
ENG21DS0002	ABHISHEK.A	9.88
ENG21DS0003	ABHISHEK.N	9.72
ENH21DS0013	CHAITRASHREE.P	9.44
ENG21DS0035	SAMMANA BHAVANI PRASAD	9.44
ENG21DS0046	V.NIVAS REDDY	9.44
ENG21DS0020	GOLLA PUJARI SOWMYA	9.4
ENG21DS0006	AKSHAYA.B	9.32
ENG21DS0044	THILAK.R	9.28
ENG21DS0039	SHUBHAM KUMAR	9.2
ENG21DS0045	USHASHREE.N	9.16

4TH SEMESTER RESULT ANALYSIS (2021 BATCH)



FACULTY ACHIEVEMENTS



NAME OF THE FACULTY	FDP	SESSION REVIEWER	CERTIFICATION	PROJECT FUND/HAC KATHONS/ TECH TALK
DR. SHAILA S G	02	03	03	NIL
DR. KAKOLI BORA	03	NIL	01	NIL
PROF. SHIVAMMA D	05	NIL	06	03
PROF. MONISH L	04	NIL	04	01
PROF. SINDHU A	02	NIL	02	NIL
PROF. VAISHALI B	02	NIL	NIL	NIL

STUDENT ACHIEVEMENTS



Sheetal P, Khushi Periwal, Kashish Verma, Nainesh Dalai, Christina Rebello, and Pranam Gowda Won the 2nd Prize in Group dance in the Samskruthi Fest organised by BMS College of Commerce Management and BMS Evening College of Arts and Commerce, Bangalore on 8th July 2022, and 3rd prize in inter college competition held at Sindhi College on 22nd July 2022



- **R D Lohith, Pranav S S, Manju Swaroop, and Sukrutha G** of 5th Semester Data Science students selected as Global Nominee in the NASA Space Apps Challenge 2022 in the International Hackathon hosted by DSU virtually during Oct 1-2, 2022 and Visited the T-Hub Hyderabad.



Vinuraj Vamshi, Soundarya Jois, Vishal Binil and Dhruthi Purushotham 1st Semester have won the 2nd place in the "IDEATHON - II" organised by the DSU X TEMPETE an AI&ML Department Club, Department of Computer Science and Engineering (AI/ML) on 25th November, 2022.



Vinuraj Vamsi, Vishal Binil and Vishanth Rakshit 1st Semester students 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

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



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

Ayesha Malaika, Adithya Challa and Varun N (6th Semester I section Dept. of CSE (DS)) won the Second Place in the Eni Act 2.0 event Inter Collegiate fest annual Syntaxia organised by the Cybernetics Association on 23rd and 24th February, 2023 at St Joseph's University



Winners - Annual Sports Meet 26th April, 2023



Abhishek (4th Semester J section - Second Place in Carrom Men Doubles and Men Singles

Varun (6th Semester I section - First Place in Stand up Comedy

Mir Khyrun Ali (4th Semester J section - second Place in Beat Boxing



Rakshita R, Akshaya B and Bindu B (4th Semester J section - Third Place in Rangoli

Winners - Project Expo "MINDSPARK-2023" Team of Tangents

Theme I - IOT (4th Semester)



R Prem Kumar Reddy, Rakshita R, Ushashree N - 1st Place



Mir Khyrun Ali, Prasad, Eshwar M, Nikunj - 2nd Place



Chaithra K, Shubham Kumar, Nivas Reddy - 3rd Place

Theme II - Data Science (6th Semester)



Sukrutha G and Manju Swaroop - 1st Place



Chandan M Poonacha and Rudra Narayan Chetty - 2nd Place



Ayesha Malaika and Varun N - 3rd Place

STUDENT ACHIEVEMENTS

- **Mr. R D Lohith**, 4th Semester Data Science Program secured the first prize in the Python Quiz organized by the AI/ML club of CSE on 16th March 2022.
- **Ms. Yashna Karkera and Mr. Pranav S S** of the 4th Semester, Data Science Program secured the second prize in the python Quiz organized by the AI ML club of CSE on 16th March 2022.
- **Ayesha Malaika** of 4th Semester Data Science Program secured the first prize in the technical debate organized by the Electroblitz club of EC on 26th March 2022
- **Dhanusha R, Hritikka N, P.Vanavee** of 4th semester from the Data Science Program participated in Art exhibition, where the students presented their Drawings, Paintings and Photography organized by Fine Art club at SOE on 14th may 2022.
- **R D Lohith and Rudra Narayan Chetty** published a Research paper titled Gene Expression Analysis Using Particle Swarm Optimization and Machine Learning Algorithms for Diagnosing Liver Breast Cancer at ICESC 2022, Department of ECE, Hindusthan Institute of Technology, Coimbatore held between 17th - 19th August, 2022.
- **Akshaya & Bindhu** of 3rd Semester Data Science students have won the 1st place in the "Diya Designing Competition" on 21st October 2022 organised by the DataScience@DSU club, Department of Computer Science and Engineering (Data Science).
- **Chethan S** of 5th Semester Data Science students have won the 3rd place in the "Diya Designing Competition" on 21st October 2022 organised by the DataScience@DSU club, Department of Computer Science and Engineering (DataScience).
- **Dhanusha R, Hrithika N** of 5th Semester Data Science students have won the 2nd place in the "Diya Designing Competition" on 21st October 2022 organised by the DataScience@DSU club, Department of Computer Science and Engineering (Data Science).
- **Gagana Malleshachari, Vaibhavi Akshita Reddy** of 5th Semester Data Science students have won the 3 rd place in the "Diya Designing Competition" on 21 st October 2022 organised by the DataScience@DSU club, Department of Computer Science and Engineering (Data Science).

STUDENT ACHIEVEMENTS

- **Sowmya Raj** 3rd Semester have participated in the “Hackathon” organised by DSU Aerospace Department on 16th November 2022 - 17th November 2022.
- **Vedanth V Baliga**, Subha Prakash Pattnaik, Amrin Taj 2nd prize in CodifAI ML Competition organised by AI Works Club, Dept. of CSE (AIML) on 18th November 2022
- **Sukrutha G and Rudra Narayan Chetty** 3rd prize in One day Codeathon-C organised by the Department of Computer Science and Engineering (Data Science) on 24th September 2022.
- **Shilpa Singh, Shreya Sridharan, Shaikh Aaman and Roopak Raghu** 1st Semester have won the 1 st place in the “Young India-Ideathon 2022” organised by the DataScience@DSU club, Department of Computer Science and Engineering (Data Science) in the association with CSI on 10 th December, 2022
- **Adeesh, Anshul, Anusha and Amrita** 1st Semester have won the 3rd place in the “Young India-Ideathon 2022” organised by the DataScience@DSU club, Department of Computer Science and Engineering (Data Science) in the association with CSI on 10th December, 2022
- **Ayesha Malaika, Adithya Challa and Varun N** (6th Semester I section Dept. of CSE (DS)) won the Second Place in the Eni Act 2.0 event Inter Collegiate fest annual Syntaxia organised by the Cybernetics Association on 23rd and 24th February, 2023 at St Joseph University
- **Pranav S S** (6th Semester I section, Dept. of CSE (DS)) has successfully completed 4 weeks of project from 23 January to 21 February 2023 under the Graphene Fellowship Programme.
- **Shaik Waseem** (4th Semester J section Dept. of CSE (DS)) won the First Place in Gaming Volarent in the Annual Sports meet conducted by Dayananda Sagar University on 26th April, 2023.

RESEARCH PUBLICATIONS - JOURNALS

1. Gurudas, V.R., Shaila S.G. & Vadivel, A. Breast Cancer Detection and Classification from Mammogram Images Using Multi-model Shape Features. SN COMPUT. SCI. 3, 404 (2022). <https://doi.org/10.1007/s42979-022-01290-y>
2. Shaila, S G, Vadivel, A. & Avani, S. "Emotion estimation from nose feature using pyramid structure" Multimed Tools Appl (2023). <https://doi.org/10.1007/s11042-023-14682-w>
3. Prasanna, M.S.M., Shaila, S.G. & Vadivel, A. Polarity classification on twitter data for classifying sarcasm using clause pattern for sentiment analysis. Multimed Tools Appl (2023). <https://doi.org/10.1007/s11042-023-14909-w>

CONFERENCE PAPERS

1. Kumar Bhadra, A., Shaila S.G., Banga, M.K. (2022). Review on Sentiment Analysis and Polarity Classification of Sarcastic Sentences using Deep Learning in Social Media. In: Bhateja, V., Khin Wee, L., Lin, J.CW., Satapathy, S.C., Rajesh, T.M. (eds) Data Engineering and Intelligent Computing. Lecture Notes in Networks and Systems, vol 446. Springer, Singapore. https://doi.org/10.1007/978-981-19-1559-8_24
2. Shaila S.G. et al. (2022). Analysis and Prediction of Breast Cancer using Multi-model Classification Approach. In: Bhateja, V., Khin Wee, L., Lin, J.CW., Satapathy, S.C., Rajesh, T.M. (eds) Data Engineering and Intelligent Computing. Lecture Notes in Networks and Systems, vol 446. Springer, Singapore. https://doi.org/10.1007/978-981-19-1559-8_12
3. Shaila S.G., Gurudas, V.R., Hithyshi, K., Mahima, M., PoojaShree, H.R. (2022). CNN-LSTM- Based Deep Learning Model for Early Detection of Breast Cancer. In: Bhateja, V., Khin Wee, L., Lin, J.CW., Satapathy, S.C., Rajesh, T.M. (eds) Data Engineering and Intelligent Computing. Lecture Notes in Networks and Systems, vol 446. Springer, Singapore. https://doi.org/10.1007/978-981-19-1559-8_9
4. Shaila S.G., Prasanna, M.S.M., Shazia, Bhavya Shree, C., Arya, S., Deshpande, K.P. (2022). Polarity Classification of Sarcastic Sentence Patterns Based on N-Gram Technique for Twitter Dataset. In: Bhateja, V., Khin Wee, L., Lin, J.CW., Satapathy, S.C., Rajesh, T.M. (eds) Data Engineering and Intelligent Computing. Lecture Notes in Networks and Systems, vol 446. Springer, Singapore. https://doi.org/10.1007/978-981-19-1559-8_25
5. Shaila S.G., Lavanya, S., Rajesh, T.M., Bhuvana, D.S., Deshpande, K. (2022). Early Detection of Diabetic Retinopathy Using Multimodal Approach. In: Bansal, J.C., Engelbrecht, A., Shukla, P.K. (eds) Computer Vision and Robotics. Algorithms for Intelligent Systems. Springer, Singapore. https://doi.org/10.1007/978-981-16-8225-4_8
6. Shaila S.G., Gurudas, V.R., Rakshita, R., Shangloo, A. (2022). Music Therapy for Mood Transformation Based on Deep Learning Framework. In: Bansal, J.C., Engelbrecht, A., Shukla, P.K. (eds) Computer Vision and Robotics. Algorithms for Intelligent Systems. Springer, Singapore. https://doi.org/10.1007/978-981-16-8225-4_4

7. Shaila S.G., Rajesh, T.M., Lavanya, S., Abhishek, K.G., Suma, V. (2022). Music Therapy for Transforming Human Negative Emotions: Deep Learning Approach. In: Mahapatra, R.P., Peddoju, S.K., Roy, S., Parwekar, P., Goel, L. (eds) Proceedings of International Conference on Recent Trends in Computing . Lecture Notes in Networks and Systems, vol 341. Springer, Singapore. https://doi.org/10.1007/978-981-16-7118-0_9
8. Prasanna, M.S.M., Shaila S.G., Vadivel, A., Mittal, M., Hithyshi, K., Pooja Shree, H.R. (2022). Sarcastic Sentiment Detection and Polarity Classification of Tweets Using Supervised Learning. In: Mahapatra, R.P., Peddoju, S.K., Roy, S., Parwekar, P., Goel, L. (eds) Proceedings of International Conference on Recent Trends in Computing . Lecture Notes in Networks and Systems, vol 341. Springer, Singapore. https://doi.org/10.1007/978-981-16-7118-0_15
9. Vijayalaxhmi Inamdar, Shaila SG, Ganapati Bhat, Hithyashi K, Arya Suresh (Accepted) - "Early Detection of Breast Cancer based on HER-2 DNA Genomic Sequence" in proceedings of Intl. Conference on Applications of Machine Intelligence and Data Analytics (ICAMIDA 2022), Springer, 22-24 Dec, 2022.
10. Shaila, S.G., Bhat, G., Gurudas, V.R., Suresh, A., Hithyshi, K. (2023). BRCA1 Genomic Sequence Based Early Stage Breast Cancer Detection. In: Mahapatra, R.P., Peddoju, S.K., Roy, S., Parwekar, P. (eds) Proceedings of International Conference on Recent Trends in Computing. Lecture Notes in Networks and Systems, vol 600. Springer, Singapore. https://doi.org/10.1007/978-981-19-8825-7_22
11. Shaila, S.G., Sindhu, A., Shivamma, D., Suma Avani, V., Rajesh, T.M. (2023). Human Emotion Recognition Based on EEG Signal Using Deep Learning Approach. In: Mahapatra, R.P., Peddoju, S.K., Roy, S., Parwekar, P. (eds) Proceedings of International Conference on Recent Trends in Computing. Lecture Notes in Networks and Systems, vol 600. Springer, Singapore. https://doi.org/10.1007/978-981-19-8825-7_44
12. SG Shaila, D Vinod, Joycelita Dias, Suman Patra "Twitter Data-based Sarcastic Sentiment Analysis using Deep Learning Framework," 2022 International Conference on Artificial Intelligence and Data Engineering (AIDE), Karkala, India, 2022, pp. 326-330, doi: 10.1109/AIDE57180.2022.10060759.
13. SG Shaila, D Shivamma, US Monica, K Tejashree "Facial Expression Recognition for Compound Emotions using Mobile Net Architecture," 2022 International Conference on Artificial Intelligence and Data Engineering (AIDE), Karkala, India, 2022, pp. 187-190, doi: 10.1109/AIDE57180.2022.10060734.
14. SG Shaila, D Vinod, Siddarth Sargunraj "Sentence Patterns based Sarcasm Detection and Classification using Long Short Term Memory Model," 2022 International Conference on Artificial Intelligence and Data Engineering (AIDE), Karkala, India, 2022, pp. 301-305, doi: 10.1109/AIDE57180.2022.10060635.
15. SG Shaila, VR Gurudas, L Monish, D Shivamma, N Sneha, Lekha Chowdary "Breast Cancer Detection based on Deep Neural Network using Multi-Model Features," 2022 International Conference on Artificial Intelligence and Data Engineering (AIDE), Karkala, India, 2022, pp. 92-95, doi: 10.1109/AIDE57180.2022.10059908.



**DAYANANDA SAGAR
UNIVERSITY**



DSU Main Campus:

Devarakaggalahalli, Harohalli,
Kanakapura Road, Ramanagara Dt.,
Bengaluru – 562 112
E-mail: admissions@dsu.edu.in

DSU City Innovation Campus:

Administrative & Main Admission office,
Kudlu Gate, Hosur Road,
Bengaluru - 560 068
Admissions Helpline: 080 49092924 / 25
E-mail: admissions@dsu.edu.in |
dsat@dsu.edu.in

DSU City Admissions Office:

Gate 2, 6th Floor, University Building,
Dental Block, Kumaraswamy Layout,
Bengaluru - 560111
Admissions Helpline: 080 46461800
E-mail: dsat@dsu.edu.in / enquiry@dsu.edu.in
/ admissions@dsu.edu.in



**SCHOOL OF
ENGINEERING**