

DEPARTMENT OF DATA SCIENCE AND BUSINESS SYSTEMS

# DATA CHRONICLE

Volume 2 Issue 3 | January 2024 | Quarterly Edition



# HAPPY NEW YEAR 2024

Wishes for successful and  
progressive 2024.



## FROM HOD'S DESK

As we bid farewell to the old and welcome the new, I would like to take this opportunity to extend my heartfelt New Year wishes to each and every one of you. The past year has been filled with challenges and triumphs, and your dedication and hard work have truly made a difference.

As we embark on this new journey together, let us embrace the opportunities that lie ahead and continue to strive for excellence in our academic endeavors. May the coming year be marked by growth, innovation, and success for both our students and our department as a whole.

I appreciate the passion and commitment that each of you brings to our academic community. Your efforts have not gone unnoticed, and I am confident that, together, we will achieve even greater heights in the upcoming year.

Let us support each other, collaborate on new initiatives, and foster an environment that encourages both personal and professional development. May the New Year bring new ideas, fresh perspectives, and the continued pursuit of knowledge that defines our department.

Wishing you and your loved ones a joyous New Year filled with happiness, good health, and prosperity. May our shared journey in the academic realm be rewarding and fulfilling.

Thank you for your continued dedication, and I look forward to another year of shared accomplishments.



## PROF M. LAKSHMI

Head of Data Science and Business Department

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Official Newsletter for Department of Data Science and Business Systems

## *Data for Social Good*

The Department of Data Science and Business Systems at SRMIST was established in 2021 with the aim of providing students with the necessary technical expertise and skills to become entrepreneurs and product developers in the field of data science and business analytics. The department is at the forefront of innovation, bridging the gap between data-driven decision-making and business strategy. The department's interdisciplinary approach combines the fields of computer science, statistics, and business, fostering collaboration and encouraging the exchange of ideas. This unique blend of expertise allows for the development of innovative solutions that address real-world challenges.

"The department envision to:

- Prepare the next generation of practitioners and researchers for a data-centric world to expand the capacity to securely store and distribute data.
- Explore and innovate tools and techniques for efficient data visualization to support the business process; and
- Motivate and nurture young minds with an equal appreciation of business processes and human values.

## Specializations @ DSBS

### Technology Specializations

- Big Data Analytics (BDA)
- Blockchain Technology (BCT)
- Gaming Technology (GT)
- Data Science (DS)
- Computer Science & Business Systems (CSBS)

### Courses and Levels offered

#### Under Graduate Programs

- B.Tech CSE with BDA
- B.Tech CSE with GT
- B.Tech CSE with BCT
- B.Tech CSBS
- B.Tech CSE with Data Science

#### Post Graduate Programs

- M.Tech CSE with BDA
- M.Tech CSE with DS
- M.Tech CSE with DE
- Intg M.Tech CSE with specialization in Data Science [ 5 Years Course ]



## DATA MONARCHY

The Power Dynamics- The Digital Guardian

*"Darkness cannot drive out darkness: only light can do that. e cannot drive out hate; only only love can do that"-Martin Luther King Jr.*



**Dr. B. Amutha**  
SCO-Newsletter Head

Dear Cohorts!

Blessed New Year 2024 to All. Awaiting for the Positive Surprises Always!!!

The concepts of data protection and data sovereignty have become even more intertwined and crucial of late, especially in cloud computing environments. As data becomes more and more valuable for individuals and organizations, data sovereignty, protection, and privacy have become critical aspects for building trust and creating added value. Data protection is essential for data sovereignty because it helps ensure that an organization maintains control over its data, prevents unauthorized access and data breaches, and safeguards the privacy and security of its customers, partners, and employees. This is especially important in today digital age, where data breaches are becoming more common. Therefore, organizations must prioritize data protection to ensure data sovereignty and maintain customer trust. Data protection refers to safeguarding critical, confidential, and personal data to avoid getting corrupted, compromised, or lost.

Data protection also ensures that data is only accessible for authorized purposes and can be restored if rendered unusable or inaccessible. In recent years, many countries and regions have passed data protection regulations, such as the EU GDPR, the California Consumer Privacy Act in the US, the Privacy Act in Canada, and the General Personal Data Protection Law in Brazil.

Data sovereignty refers to the concept that data generated and processed within a specific geographical location is subject to the laws and regulations of that region. This definition means businesses must comply with data privacy regulations and best practices within their jurisdiction or the region where they provide services. Data sovereignty also refers to the organizations ability to control and protect their data against potential interference or data breaches.

The concepts of data protection and data sovereignty become even more intertwined and crucial in cloud computing environments and are essential when migrating workloads to the cloud. Companies must know where their data is hosted and rely on services and infrastructure that enable them to comply with the regulations of the regions or countries, they are operating in. Safeguard digital rights, maintain control and ownership, demonstrate compliance with laws,



# CHIEF EDITOR'S WORDS

# DATA CHRONICLE

DEPARTMENT OF DATA SCIENCE AND BUSINESS SYSTEMS

Strengthen national security, provide opportunities for business growth, build customer trust, mitigate data security risks, avoid legal conflicts are in the process of data protection which is a crucial component of data sovereignty, as it provides the necessary framework and security measures to protect customer rights and maintain control over the data generated and processed. Data protection enables an organization to exercise its sovereignty over data and sets the foundation for responsible and ethical data management practices. In early August 2023, the Indian Parliament passed the Digital Personal Data Protection (DPDP) Act, 2023.

The new law is the first cross-sectoral law on personal data protection in India and has been enacted after more than half a decade of deliberations. We as a University, being the Kingdom of data, we have to do wonders.

The Department of DSBS assures its responsibility in maintaining data protection acts and polices through the way of educating and knowledge leasing to the students and faculty by conducting various events and making them to participate in and out of the premises.

The faculty members are able to receive fundings, establishing new laboratories, preparing problem statements aligned with industry expectations, making the students walk in the direction of the innovative future path, what the community needs. They well concentrate upon cyber forensics, Gaming, Blockchain and Generative AI solutions. Their consistent efforts are portrayed periodically for your better vision. Go through Data Chronicle with your eagle eyes and fortify your comments.

"WELL DONE IS BETTER THAN WELL SAID" -  
BENJAMIN FRANKLIN  
STAY TUNED! MUSIC NEVER YAWN!

**Dr. B.Amutha**, SCO-Newsletter Head

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## Advisor



**Dr. M. Lakshmi**  
DSBS - HOD



**Dr. K. Shantha Kumari**



**Dr. R. Rajkumar**



**Dr. SV. Shri Bharathi**

## Support Team



**Ms R.S. Sangeetha**



**Ms. R. Mahalakshmi**



**Mr. D. Gowtham**

By Editorial Team

Get ready to dive into the world of data, where the tide is rising fast. The data science sector is booming, projected to reach a staggering \$133 billion by 2024, bringing with it a wave of exciting opportunities and lucrative careers. This expertise will be gold in diverse fields like agriculture, healthcare, finance, and even government, as organizations crave insights to navigate and thrive in an increasingly complex world.

But it's not just about numbers; we're also witnessing a profound shift in how we analyze and interact with data. Deep learning technologies like transformers and generative AI are becoming the magic wands for solving tough problems across domains. And as ethical concerns surrounding AI algorithms rightfully grow louder, tools like XAI (Explainable AI) will become essential for building trust and ensuring transparency in our technology. Prepare for the edge computing revolution too, where data processing shifts closer to source devices, enabling lightning-fast applications and enhanced privacy in sensitive scenarios. Decentralized data solutions will also gain traction, empowering individuals and organizations to take control of their own information. So buckle up, data enthusiasts! Buckle up, curious minds! This is an era where data takes center stage, shaping the future of every industry and reshaping the way we live, work, and interact with the world around us.

## Newsletter Highlights

### • Department News

- 6 days PDP - Current Era: Enhancement of Multifaceted Competency of Faculty
- Augmented Reality (AR) and Virtual Reality (VR)-A Three day Workshop on upskilling
- Tech Vistara 2.0
- Data Kon '23
- ACM winter school on Data Science for Social Good
- Memorandum of understanding with TeK Wizard & Garuda Aerospace
- Center of Excellence in Blockchain
- Motivational Talks

### • People of DSBS

- Faculty Achievements
- Publications and Patents
- Faculty upskilling
- Welcome to DSBS Family
- FAP experiences

### • Students of DSBS

- Industrial visit to CDAC
- India Game developer Conference
- ARWEAVE
- Students' achievements
- Placement and Internship testimonials
- Alumni Corner



# Current Era: Enhancement of Multifaceted Competency of Faculty

## A Six Day Professional Development Programme



The inaugural session on October 16, 2023, marked the commencement of the professional development program. **Dr. M. Lakshmi**, Professor & Head of the Department of Data Science and Business Systems, extended a warm welcome to guests and participants. **Mr. H R Mohan**, CSI Chairman, inaugurated the program, providing motivation for participants to embrace recent trends in research and academics. **Dr. S. Suchitra**, Associate Professor, delivered an overview of the workshop, and **Dr. K. Arthi**, Associate Professor, expressed gratitude through the vote of thanks.

**Sessions 1 and 2** on the same day focused on "Innovative Pedagogy for Effective Teaching and Learning," presented by **Dr. Vairavel G** from the Directorate of Learning and Development at SRMIST, KTR. The session delved into cutting-edge pedagogical approaches leveraging technology for heightened student engagement, critical thinking, and subject mastery.

Moving to the **session 3** on October 17, **Dr. Ashwini Maran, Professor** from Sri Ramachandra Medical College and Research Institute, addressed the importance of maintaining a "Balancing Act: Stress Management in the Workplace." The session explored effective stress management strategies crucial for a balanced and harmonious work environment.

On the same day, **Session 4**, featured **Dr. P Malliga, Professor** from the National Institute of Technical Teachers Training and Research, Chennai. The session focused on "Experiential Learning using Immersive Technology," highlighting the transformative impact of immersive technology on education, providing realistic, hands-on experiences.

**Sessions 5 and 6** on October 18 featured **Dr. Komathy K**, a retired Professor & Vice-Chair of the CSI Chennai Chapter. Dr. Komathy explored "Grant Proposal Precision: Skills for Success in Research," emphasizing the key skills required for crafting compelling grant proposals.

October 19 saw **Session 7**, "Driving Innovation Together: Industry-Institution Collaboration Excellence," conducted by **Mr. G. Ramprasad**, Developer in DevOps and Innovation APAC at KONE. This session delved into the dynamics of successful partnerships between industries and academic institutions, fostering innovation and real-world problem-solving.



# CURRENT ERA: ENHANCEMENT OF MULTIFACETED COMPETENCY OF FACULTY

## A Six Day Professional Development Programme

In the afternoon of the same day, **Session 8** revisited the theme of grant proposal precision, and effective proposal writing.

The program continued on October 20 with **Session 9** in which the participant's navigated through the "Quality Roadmap." The session provided strategies for effective Quality Parameter (QP) setting, evaluation strategies, and Course Outcome (Co-PO) attainment, promoting excellence in academic outcomes. **Session 10 featured Mr. J Vijay Rathan Lingaa**, Techno-legal Advisor from the Directorate of Entrepreneurship and Innovation at SRMIST, KTR. This focused on the "Patent Drafting Blueprint," guiding participants on turning innovative ideas into valuable assets through precise language and strategic protection strategies.

The penultimate **session 11** on October 21, conducted by **Dr. Deeba K**, Faculty in C.Tech at SRMIST, KTR, explored "Creating Impactful Online Resources: Empowering Educators." The session aimed to equip educators with versatile digital resources, fostering a dynamic and inclusive learning environment. Closing the program on the same day, **Dr. N. Sivakumar**, Professor in CSE at Puducherry Technological University, emphasized the "Importance of Professional Society Membership". The **session 12** focused on strategies for empowering educators to adapt to evolving educational landscapes and make a lasting impact on student learning outcomes.

Overall, the sessions covered a wide range of topics, from innovative pedagogy and stress management to industry-institution collaboration, grant proposal writing, and the strategic importance of professional society memberships, providing participants with a comprehensive and insightful professional development experience.



The Professional Development Programme aims to equip academics with diverse skills, including modern teaching methodologies and cutting-edge technologies, ensuring high-impact and globally applicable training. This multifaceted competency enhances the quality of professional development, fostering the growth and success of participants in the dynamic educational landscape.



# AUGMENTED REALITY (AR) AND VIRTUAL REALITY (VR)

## A Three day Workshop on upskilling

The Department of Data Science and Business Systems at the School of Computing conducted "Three-Day Workshop on Augmented Reality (AR) and Virtual Reality (VR)" from 16 - 18 Oct 2023 at iMac Lab. One of the highlights of this workshop was the collaboration with Hackwit Technologies, a well-known technology company based in Chennai. This partnership brought an exciting dimension to the event, offering attendees the chance to learn from experts in the field. The success of this workshop underscores the importance of staying updated in the ever-evolving fields of AR and VR, and we look forward to more such informative and collaborative events in the future.



The workshop featured two distinguished speakers from Hackwit Technologies:

**Mr. Ravi Kumar, CEO** of Hackwit Technologies. Mr. Ravi is a seasoned professional in the AR and VR domain, bringing a wealth of knowledge and experience to the workshop.

**Mr. Suhail, Developer** at Hackwit Technologies: As a developer at Hackwit Technologies, Mr. Suhail shared his practical insights into the development and application of AR and VR technologies.

This workshop represented a unique opportunity for individuals interested in AR and VR to stay at the forefront of emerging technologies and expand their horizons. It was a not-to-be-missed event for anyone seeking to unlock the endless possibilities of AR and VR. The organizers look forward to future events that continue to foster learning and innovation in the technology field.

# TECH VISTARA 2.0

## A Techo- Social Outreach Program for School Children



SRM Institute of Science and Technology (SRM IST) proudly hosted the second edition of Tech Vistara, an outreach event aimed at igniting an interest in technology among school children. The event, organized by the Department of Data Science and Business Systems, School of Computing, welcomed around 15 schools to the Dr. T.P Ganesan Auditorium on November 18th, 2023. Thiru. T. Soundarajan, Municipal Commissioner for Maraimalai Nagar, graced the occasion as the Chief Guest. Dr. B. Radhakrishnan, Head of the Department of Ophthalmology at SRM Medical College Hospital and Research Centre, delivered a felicitation address. Prof. R. Mohana Krishnan, Director of Sports at SRM IST, was also invited as a special guest. Prof. Dr. Revathi Venkataraman, Chairperson of the School of Computing, extended a warm welcome to all the school children participants. Nearly 460 students from various schools in and around Chennai participated in this event. The event kicked off with an introductory talk about Tech Vistara by Dr. M. Lakshmi.





# TECH VISTARA 2.0

## A Techo- Social Outreach Program for School Children

Throughout the day, students engaged in a variety of activities designed to enhance their understanding of technology and its applications. These activities included a Game Technology workshop, Coding contest, Project expo, Oratorical in Tamil and English, Shipwreck, poster design, and Quiz.



The valedictory ceremony marked a fitting end to the successful event. Mr. Lakshmi Narasimhan, Director of the Directorate of International Relations and a renowned technologist, delivered an inspiring speech to the participants. He encouraged them to pursue their passion for technology and utilize their skills to make a positive impact on the world.



Students were honored with cash prizes and certificates for their active participation. Tech Vistara 2.0 proved to be a resounding success, sparking an interest in technology among school children and motivating them to explore its potential for making a positive impact on the world. SRM IST remains committed to continuing the tradition of hosting Tech Vistara and other outreach events in the future.





# TECHVISTARA BLENDER WORKSHOP

## Workshop by Gaming Technology students

The students of B.Tech Computer Science and Engineering with Specialization in Gaming Technology, Department of Data Science and Business Systems, conducted a workshop on 3D modelling during Tech Vistara 2023 on the 18th of November 2023.

The one Day workshop was aimed towards students from various schools in and around Chennai. Around 60 students from std 9th to 12th attended the 3D modelling workshop. The workshop began at 11 am with a presentation teaching the students the basics of 3D modelling. It tackled concepts such as 2D & 3D shapes, Polygons, Polygon counts in Games & uses of 3D modelling in various industries.



The hands-on section of the workshop saw the students work with Blender, an open-source 3D Modelling software. A team of 6 Gaming Tech students were assigned to teach, support and clarify the doubts of students in the following topics: Introduction to Blender UI - Adding and Deleting Elements on screen - Scaling, Rotation and Movement of Objects - Edit mode uses and applications. - Extrude, Inset Faces, Bevel, Loop Cuts - Vertex Painting

The students found the session very interactive and were excited of their newfound ability and knowledge to make 3d models. The students were given complete freedom to work with blender for the last hour to create models of their own liking. Students had a lot of fun experimenting with the various functions they learnt in the session and used their creativity to create interesting models such as snowmen, cars, tractors and whatnot. The workshop was a massive success as students found a newfound love towards 3d modelling and many started considering 3D modelling to be a viable career choices.



## DATA KON '23

## DSBS Student Association event

DataKon events serve as a platform for individuals passionate about data to learn, share knowledge, gain practical experience, and stay updated on the latest advancements in the field of data science and technology.

## DSBS Student Association



The inaugural session of DataKon'23 commenced with a cultural tribute to the Tamil motherland and culture through the rendition of the 'Tamil Thai Vazhthu.' Following this, a Welcome Address was delivered to set the tone for the event. Subsequently, the Head of the Department **Prof. M. Lakshmi** addressed the audience, offering valuable perspectives and well-wishes for the event's success. Following events were organized as part of DataKon'23

**Event 1 - Coding and Debugging:**

Participants engaged in a dynamic coding and debugging session on the HackerRank platform. They tackled a variety of programming challenges, honing their problem-solving skills. This session provided a great opportunity for hands-on coding practice, fostering a spirit of innovation and excellence among participants.

**Event 2 - App Development:**

The App Development workshop inspiring budding mobile app creators. Participants explored the intricacies of app development, from ideation to implementation, gaining valuable insights into the world of mobile applications. The session served as a stepping stone for those looking to turn their app ideas into reality.

# DATA KON '23

DSBS Student Association event



## Event 3 - Web Development:

Simultaneously, the Web Development workshop commenced, delving into the art of creating captivating websites. Attendees learned about HTML, CSS, and JavaScript to craft functional web pages and explore the fundamentals of front-end development. This session provided an excellent foundation for those eager to excel in the web development arena.

The Valedictory session at the end of the events took place marking the grand finale of DataKon'23. Distinguished speakers shared their insights and experiences, recognizing the achievements of participants. Prizes were awarded to the participants and attendees left the event with newfound knowledge, inspiration, and a sense of accomplishment.

DataKon'23 was an exceptional success, serving as a valuable platform for data enthusiasts to come together, explore new horizons, connect with peers, and enhance their knowledge and skills in the dynamic field of data science and technology.

One of the key highlights of the event was the diverse range of events that catered to a wide spectrum of interests and expertise levels. Attendees had the opportunity to engage in coding, app development, and web development workshops, providing them with hands-on experience and practical skills. Beyond the technical aspects, DataKon'23 offered ample opportunities for networking and knowledge sharing. The event fostered a sense of community among data enthusiasts, creating an environment where collaboration and innovation thrived.

Overall, DataKon'23 left a lasting impact on its participants. It not only provided practical skills and technical knowledge but also ignited the spark of innovation and creativity. The event served as a testament to the ever-evolving world of data science and technology, where continuous learning and exploration are essential.





# ACM WINTER SCHOOL ON DATA SCIENCE FOR SOCIAL GOOD

## A Technical program for Girl students in STEM

The Department of Data Science and Business systems is organizing ACM winter school on Data Science for Social Good from December 11 to 22, 2023. The school is inaugurated in the august presence of **Prof. T. V. Gopal**, Dean CET, **Prof. Revathy Venkataraman**, Chairperson -School of Computing, **Prof. Venkatesh Raman**, IMSc Chennai, **Prof. Arun Rajkumar**, IIT Madras and **Prof M. Pushpalatha**, HOD of CTECH and **Prof. M. Lakshmi**, HoD of DSBS. **Prof Anirban Dasgupta**, IIT Gandhinagar is the Academic Coordinator of this school and Prof. M. Lakshmi and Dr. K.Shantha Kumari are the Local coordinators.



DEC 11 - 12, 2023

During the initial two days of the ACM India Winter School, led by **Professor Dr. Arun Rajkumar** from **IIT Madras**, participants delved into the deployability aspects of machine learning. The sessions covered fundamental topics such as machine learning introduction, classification, clustering, dimensionality reduction, and sequential learning. The exploration extended to black box methods, Convolutional Neural Networks (CNN), surrogate model learning, and techniques like LIME and SHAP, providing a comprehensive foundation for theoretical concepts and practical applications in machine learning deployment.



# ACM WINTER SCHOOL ON DATA SCIENCE FOR SOCIAL GOOD

## A Technical program for Girl students in STEM

DEC 13, 2023

On Day 3 of the ACM India Winter School hosted at SRM University, **Professor Dweepobotee Brahma** from **IIT Jodhpur** delved into the impactful integration of Big Data and Machine Learning (ML) in economics and policymaking. The session specifically highlighted the application of machine learning in these domains and explored the intersection of causal inference and machine learning, exemplified by techniques like Causal Forest.



DEC 14, 2023

On Day 4 of the ACM India Winter School, dated December 14, 2023, **Professor Ponnuram Kumaraguru** from **IIIT Hyderabad** led a session focused on Responsible AI, specifically addressing its implications in the context of mental health, CodeMix, and Legal Natural Language Processing (LegalNLP).



DEC 15, 2023

Day 5 marked an exciting excursion as we embarked on a trip to Mahabalipuram. The day promised a blend of cultural exploration and scenic delights. Our itinerary included visits to renowned historical monuments such as the Shore Temple, Arjuna's Penance, and the Five Rathas.



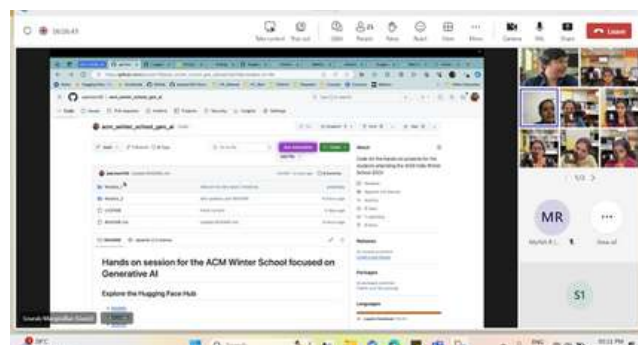
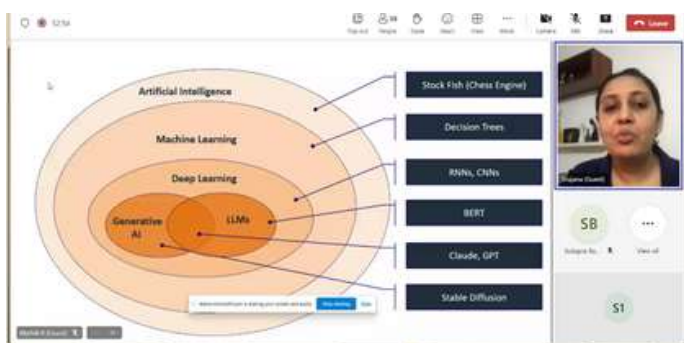


# ACM WINTER SCHOOL ON DATA SCIENCE FOR SOCIAL GOOD

## A Technical program for Girl students in STEM

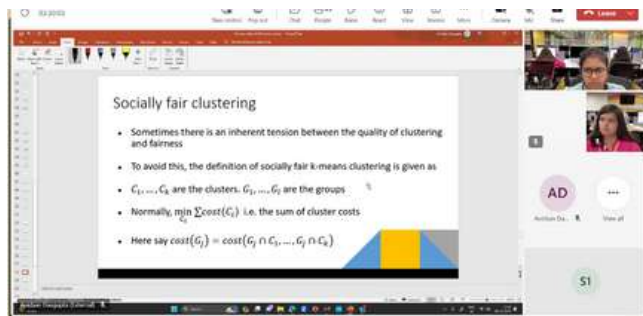
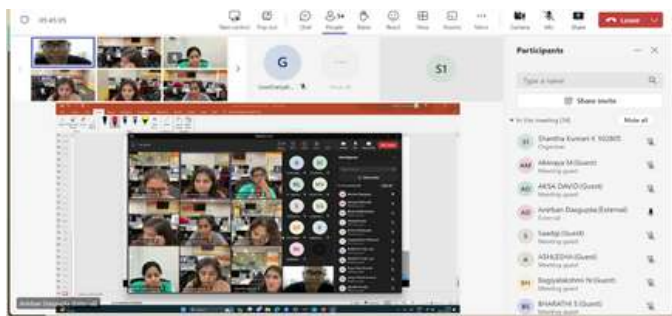
DEC 17, 2023

On Day 7, the ACM India Winter School featured a session led by **Dr. Surjana Merugu** from **Amazon**, accompanied by her colleagues **Gaurav** and **Saurab**. The focus of the session was on Generative AI, delving into cutting-edge technologies and platforms that are shaping the landscape of artificial intelligence. The team provided insights into the advancements in Generative AI, exploring its applications and implications in various domains.



DEC 18, 2023

On Day 8, December 18, 2023, **Professor Anirban Dasgupta** conducted a session on "Fairness in Machine Learning" at the ACM India Winter School. The discussion likely explored the ethical considerations and challenges associated with ensuring fairness in ML models. Professor Dasgupta's expertise likely provided participants with valuable insights into addressing biases and promoting equitable practices in the development and deployment of machine learning algorithms.



DEC 19-20, 2023

On Days 9 and 10 of the ACM India Winter School, **Dr. Shakti N Menon**, a **Senior Research Scientist in the Complex Systems group at The Institute of Mathematical Sciences, Chennai**, conducted an enlightening session. The discussion revolved around game theory, games on networks, epidemic modeling, and the dynamics of voluntary vaccination. Participants benefited from the expertise shared by Dr. Menon, enhancing their understanding of these critical topics at the intersection of mathematics and real-world systems.





# ACM WINTER SCHOOL ON DATA SCIENCE FOR SOCIAL GOOD

A Technical program for Girl students in STEM

DEC 21-22, 2023

On Days 11 and 12 of the ACM India Winter School, **Dr. Abhinjan Chakraborty** from **IIT Delhi** conducted an insightful session on "Fairness in Food Delivery." The discussion likely delved into the ethical considerations and challenges within the context of food delivery systems, exploring ways to ensure fairness and equity. The session contributed to a broader understanding of the intersection between technology, ethics, and everyday services in the evolving landscape of digital platforms.



## VALEDICTORY FUNCTION

The Valedictory Session of the ACM India Winter School was presided over by Professor M. Lakshmi from SRM Institute of Science and Technology. Professor Lakshmi delivered the valedictory address, reflecting on the Winter School's proceedings. Dr. Abhinjan Chakraborty from IIT Delhi distributed certificates, and students provided valuable feedback that comprised appreciations and suggestions. The session concluded with a vote of thanks from Dr. K. Shantha Kumari, the Local Coordinator, expressing gratitude to all involved in making the Winter School a success.



# MEMORANDUM OF UNDERSTANDING WITH VARIOUS INDUSTRIES

## Nov 09, 2023

### Garuda Aerospace Pvt Ltd & SRM

Garuda Aerospace Pvt Limited and SRMIST have signed a Memorandum of Understanding (MoU) for collaborative academic and research activities in the area of Unmanned Aerial Vehicles. Garuda's popular ventures are Kisan Drone for farmers and Agri Drone Yatra flagged off by our honourable prime minister in February 2022. **Mr. Sudhagar** Head - RPTO Training, **Mr. Kannan Chinnasamy**, Head - Center of Excellence, and **Mr. Balamurugan**, Technical Research Fellow, were present from Garuda Aerospace. **Dr. S. Ponnusamy**, Honorable Registrar, **Dr. Revathi Venkataraman**, Chairperson School of Computing, **Dr. M. Lakshmi**, HoD Data Science and Business Systems, **Dr. Hemavathi** and **Dr. K. Sornalakshmi** from SRMIST participated in the MoU signing ceremony. Dr. K. Sornalakshmi, DSBS Department would be the co-ordinator and SPOC for the MoU



## Nov 11, 2023

### Tek Wizard & SRM



SRMIST and TEK Wizard has entered into Memorandum of Understanding. The MoU was signed and exchanged by **Dr. S. Ponnusamy, Registrar, SRMIST** and **Dr. Paul Winston, CEO, Tek Wizard** in the presence of **Dr. Revathi Venkataraman**, Chairperson, School of Computing; **Dr. M. Lakshmi**, Head of DSBS and **Dr. A. Murugan**, Program Coordinator of Gaming Technology. The objective of the MoU is to create games for students to learn Coding in C, Python and Gaming tools and guide students to use coding tools to work on their mathematics and design games and solutions using Gaming Technology.





## CENTER OF EXCELLENCE IN BLOCKCHAIN

## SRMIST &amp; IDS Inc

SRMIST & IDS Inc Launch Center of Excellence in Blockchain! IDS has been associated with SRMIST under Bharat Blockchain Network supported by AICTE, Govt of India. To take this initiative to next phase and scale it on global level, IDS and SRMIST are now joining forces together to establish an industry focused center/lab for applied research and innovation in Blockchain Technology. Inaugurated by **Dr. N. Venkata Sastry**, Director, Directorate of Career Centre in the presence of **Prof. M. Lakshmi** and **Dr S. Ganesh Kumar**. The name of the lab shall be "**SRMIST - IDS - Center of Excellence in Blockchain**". This center is identified as one of the industry center establishments under University Industry Cluster (UIC) aligned with guidelines of UGC (University Grants Commission).





# MOTIVATIONAL TALKS

## Idea to Product

A Motivational talk on "Creating a Meaningful Research Group to create an impact full Product" for the Department of DSBS by **Dr. J VIJAY RATHAN LINGAA**, Techno- Legal Advisor, Centre for Intellectual Asset Protection (CIAP)- SRMDEI. The session on Creating a meaningful research group is pivotal for developing impactful products. A successful research team is more than just a collection of individuals—it is a dynamic entity that combines diverse talents and perspectives to address complex challenges. The research group involves strategic composition, shared vision, collaboration, user-centered methodologies, adaptability, ethical considerations, and a relentless commitment to achieving impactful results. By embodying these principles, a research group sets the stage for not only creating successful products but also making a positive and lasting impact on the intended users and broader society.



Dec 26 - 28, 2023

## FDP ON CERTIFIED BLOCKCHAIN ASSOCIATE

Three days Faculty development program on "Certified Blockchain Associate" is organized for upskilling Teaching members specializing in Blockchain domain. The following modules were covered in this FDP -

- Blockchain introduction,
- Core Concepts of Blockchain
- Public Blockchain bitcoin & Ethereum
- Hyperledger Introduction
- Hyperledger fabric core concepts,
- Fabric Initial configuration setup,
- Ethereum Hands-On Labs

**34 faculty got certified in - "Hyperledger Architecture" offered by IDS Inc.**

Experts from IDS Inc:

- 1.Mr. Aravind Voruganti, Global Vice President, I
- 2.Mr. Sunil Subhramanyam, Business Strategy Partner,
- 3.Mr. Dayal Mukati ,Principal architect



## FACULTY ACHIEVEMENTS

**Dr A. Murugan, Professor & Program Coordinator, Gaming Technology**



**Hearty Congratulations to Prof Dr. A.Murugan**

He is awarded with USD \$1,000 fund by AUAP - Association of the Universities of Asia and the Pacific Research Fund 2021.

Project Title: Deep Learning System for Detecting Diabetic Retinopathy.



**Dr D. Rajeswari, Associate Professor**

**Hearty Congratulations to Dr. D. Rajeswari**



She is awarded with 2 Projects funded by Divyasampark iHUB for Devices Materials and Technology Foundations, IIT Roorkee through Shoolini University Spoke HUB.

Project 1: Spark-Break- IoT based fire control device to prevent fire accidents in firecracker manufacturing industries

Project 2: Digital Twin empowered Drones to assist the farmers to optimize the agricultural field yield.

For both projects, the sanctioned amount is Rs. 9,99,860 /-



**Dr K. Priyadarsini & Dr J. Jeba Sonia; Assistant Professor**

**Hearty Congratulations to both**



Both Teachers received a seed grant of Rs.3,70,000/ This grant has been awarded under the Selective Excellence Research Initiative, based on the commendations of the review committee. The allocated budget will be utilized for procuring essential equipment, with the initial release of funds taking place in the first installment.

Project Title: Accelerating Deep Learning Algorithms: Unleashing the Power of FPGA Acceleration



# SCI PUBLICATIONS

1. **T. Nadana Ravishankar**, "Deep convolutional neural network-based real-time abnormal behavior detection in social networks," *Comput. Electr. Eng.*, 2023.
2. **V. Kavitha** and **Prabakar**, "Radar optical communication for analyzing aerial targets with frequency bandwidth and clutter suppression by boundary element mmwave signal model," *Opt. Quantum Electron.*, vol. 0306-8919, 2023.
3. **A. Shobana Devi**, "Advancements in business processes to improve business marketing processes through advanced signal processing," *Expert Syst.*, vol. 0266-4720, 2023.
4. **Syed Ismail Abdul Lathif**, "Advanced led selection and map detection in glim systems using fuzzy dynamic arithmetic optimization (FDAO) algorithm," *Opt. Quantum Electron.*, 2023, Doi: 3068919.
5. **E. P. Elumalaivasan**, "Energy Forecasting Information System of Optimal Electricity Generation using Fuzzy-based RERNN with GPC," *KSII Trans. Internet Inf. Syst.*, 2023.
6. **V. Kavitha**, "VLC modulation techniques in home automation system using light emitting diodes for data transmission," *Journal of Optics*, 2023, Doi: 9728821.
7. **Rajakani M**, "Invasive weed optimization with deep transfer learning for multispectral image classification model," *Multimedia Tools and Applications*, 2023, Doi: 1573-7721.
8. **A. Syed Ismail**, "Securing the Information using Improved Modular Encryption Standard in Cloud Computing Environment," *KSII Transactions on Internet and Information Systems*, 2023, Doi: 1976-7277.
9. **A. Sasikumar**, "A Decentralized Resource Allocation in Edge Computing for Secure IoT Environments," *IEEE Access*, 2023, Doi: 2169-3536.
10. **K.S.Archana**, "Detecting Distributed Denial of Service (DDoS) in MANET Using Ad Hoc On-Demand Distance Vector (AODV) with Extra Tree Classifier (ETC)," *Iranian J. Sci. Technol. - Trans. Electr. Eng.*, 2023, Doi: 2364-1827.
11. **K. Harshini Poojaa** and **B. Subashini**, "Enhancing Supply Chain Efficiency and Security: A Proof of Concept for IoT Device Integration with Blockchain," *IEEE Access*, 2023, Doi: 2169-3536.
12. **T. Nadana Ravishankar**, **M. Ramprasath**, "White shark optimizer with optimal deep learning based effective unmanned aerial vehicles communication and scene classification," *Scientific Reports - Springer*, 2023, Doi: 2045-2322.
13. **M. Geetha Jenifel**, "Secure water quality prediction system using machine learning and blockchain technologies," *Journal of Environmental Management*, 2023, Doi: 1095-8630.
14. **B. Arunsundar**, "Optoelectronic device-based failure management using content based multispectral image retrieval and deep learning model," *Optical and Quantum Electronics*, 2023, Doi: 3068919.
15. **M.Prakash**. (2023). "An automatic lung nodule detection and classification using an optimized convolutional neural network and enhanced k-means clustering". *Journal of Ambient Intelligence and Humanized Computing*. 14. 10.1007/s12652-023-04711-9.
16. **M. Mercy Theresa**, "CAD-based automatic detection of tuberculosis in chest radiography using hybrid method", *International Journal of Engineering Systems Modelling and Simulation (IJESMS)*, Vol. 14, No. 4, 2023



# PATENTS

1. **Dr. Prabhu Kavın B** - "HIGH-PERFORMANCE THIN-LAYER CHROMATOGRAPHY (HPTLC) FOR ANALYSIS OF CHEMICAL COMPOUNDS" - Patent from the patent office, Government of India.
2. **Dr. T. Ragupathi** - "AI-POWERED PREDICTIVE MAINTENANCE SYSTEM FOR INDUSTRIAL ROBOTICS" - Patent from the patent office, Government of India.
3. **Dr. K. Arthi** - "ROBOT BASED ON CHATBOT PROGRAM FOR GUIDING AND PROVIDING REAL TIME CONVERSATION WITH USER" - Patent from the patent office, Government of India.
4. **Dr. D. Prabakar, Dr. C. Tamizhselvan, Dr. M. Rajakani, Dr. B. Arunsundar** - "PORTABLE PRINTER" - Patent from the patent office, Government of India.
5. **Dr. Prabhu Kavın B** - "AI BASED DEVICE TO IDENTIFY LEARNING DISORDERS IN CHILDREN" - Patent from the Intellectual Property Office, Government of UK.
6. **Dr. Prakash M, Dr. Sharanya S, Dr. Shri Bharathi S V, Dr. Divya G, Dr. Radha R** - "GARBAGE SEGREGATING DEVICE USING IMAGE PROCESSING" - Patent from the patent office, Government of India.
7. **Dr. K. Arthi** - "IOT BASED SMART WATCH TO MONITOR PATIENTS" - Patent from the patent office, Government of India.
8. **Dr. S. Srividhya, Dr. A. Chinnasamy,** - "5G BASED REMOTELY CONTROL IOT STREET LAMP" - Patent from the patent office, Government of India.
9. **Dr. K.S. Archana, Dr. M.Lakshmi** - "A SYSTEM AND A METHOD FOR PREDICTING A FALSE SMUT DISEASE" - Patent from the patent office, Government of India.
10. **Dr. Rajasekar P, Dr. K. Shantha Kumari** - "Neural Network-based Predictive Maintenance for IoT-Connected Industrial Equipment" - Patent from the patent office, Government of India.
11. **Dr. Kavitha V** - "A Blockchain Based Machine Learning System For Secure And Transparent Data Sharings" - Patent from the patent office, Government of India.
12. **Dr. D.Prabakar,** - "Artificial Intelligence based system to predict pediatric disorders" - Patent from the patent office, Government of India.
13. **Dr. P. Kanmani** - "IOT BASED WASHING MACHINE FOR AGRICULTURAL CROPS" - Patent from the patent office, Government of India.
14. **Dr. A. Syed Ismail,** - "DEVICE FOR ATTENDANCE MONITORING" - Patent from the patent office, Government of India.
15. **Dr. N. Manikandan, Dr. G. Premalatha, Dr. P. Varun** - "AUGMENTED REALITY GLASSES FOR SKIN CANCER CLASSIFICATION" - Patent from the patent office, Government of India.



# FACULTY UPSKILLING

- **Dr T.Veeramakali** - Participated in 10 days of the Faculty Development Programme on "Cutting Edge Trends in Deep Learning" from 3rd October to 13th October 2023, organized by the Department of CSE, Sathyabama Institute of Science and Technology.
- **Dr D.Hemavathi, Dr K.S Archana ,Dr SV Shribharathi** - Participated in the Professional Development Programme on "Current Era: Enhancement of Multifaceted Competency of Faculty" From [16/10/2023 -21/10/2023] organized by the Department of Data Science and Business Systems, School of Computing, At SRM Institute of Science & Technology.
- **Dr. Nadana Ravisankar, Dr S.Venkatesh , Dr A.Syed Ismail, Dr P.Elumalaivasan , Dr A.Sasikumar, and Dr T.Ragupathi-** Participated in the FDP on Hyperledger fabric associate program from 26.12.2023 to 28.12.2023, organized by the Department of Data Science and Business Systems, School of Computing, At SRM Institute of Science & Technology.
- **Dr T.Veeramakali , Dr T.Nadana Ravishankar and Dr A. Shobana Devi** - Participated in 6 days of the Faculty Development Programme on "Artificial Intelligence in Data Science and its Applications in IoT" organized by the Department of Computational Intelligence, School of Computing, SRMIST, KTR from 27th November to 2nd December 2023.
- **Dr A.Sasikumar , Dr T.Ragupathi , Dr D.Prabakar and Mrs B.Yasothea** - Participated & Completed AICTE Training and Learning (ATAL) Academy Faculty Development Programme on Industry 5.0 For Healthcare 5.0 At Veltech Rangarajan Dr.Sagunthala R And D Institute of Science and Technology From [20/11/2023 - 25/11/2023].
- **Dr T.Karthick** - Participated in the Madras Section Sponsored 5 Days Faculty Development Programme (Hybrid Mode) On "Emerging Trends in Artificial Intelligence and Deep Learning" organized by Department of Electronics and Communication Engineering of Sri Sairam college of Engineering held from 26/12/2023 to 30/12/2023.
- **Dr C.Tamizhselvan** - Participated in International Level Virtual Faculty Development Programme On "Modern Research Convergence in Next Generation Computing", Organized by Department of Computer Science & Engineering, Sri Krishna College of Engineering and Technology From 18/12/2023 - 22/12/2023.
- **Dr T.Nadana Ravishankar** - Completed in One Week Online Short-Term Course On "Recent Trends In Blockchain Enabled Internet of Things" Organized by Department of Information Technology of Dr B R Ambedkar National Institute of Technology Jalandhar
- **Mrs B.Yasothea , Dr M.Arthy-** Completed the NPTEL Online Certification Course for Programming In Java in JUL - OCT 2023
- **Dr R.Anita Jasmine** - Completed the NPTEL Online Certification Course for Deep Learning For Computer Vision in JUL - OCT 2023



# WELCOME TO DSBS FAMILY



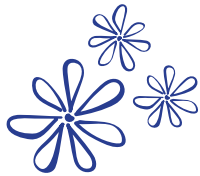
Dr.V.Prasanna



Dr. Arikumar K S



Dr P. Elumalaivasan



Dr.Rajalakshmi D



Dr S. Nandhini



We extend our warmest greetings to you and offer our heartfelt congratulations on joining our team, where your contributions will help us shine brighter together



## NOTABLE ACHEIVEMENTS

- **Dr D.Hemavathi** - Received the Certificate of Appreciation for successfully completing the worklet " Synthetic to real domain Adaption(Unsupervised) in Samsung PRISM Phase 5.
- **Dr T.Karthick** - selected as Visiting Post Doctoral Fellowship at City, University of London, UK in Disruptive Technologies
- **Dr P Suthanthiradevi** - acted as Resource Person in a National Level FDP About "Cutting Edge Trends In Deep Learning" Held at Satyabama Institute of Science and Technology on 10/10/2023.
- **Dr M.Rajakani** - Reviewer for the journal "International Journal of Plant and Soil Science Held On [20/12/2023]
- **Dr M.Geetha Jenifel** - Reviewer for the Journal of Water Resource Management.
- **Dr T.Nadana Ravishankar** - Reviewed a paper for Technology, Knowledge and learning (TKNL) - Springer.





# FACULTY ABROAD EXPERIENCE AT WASHINGTON STATE UNIVERSITY, VA, USA

## Navigating New Frontiers by Dr K. Priyadarsini

Participating in the Faculty Abroad Program at Washington State University marked a transformative journey, expanding my horizons in the realms of research and innovation. From October 11 to December 4, 2023, I dedicated my efforts to unraveling the intricacies of Energy Prediction in IoT-enabled Smart Cities. This immersive experience involved hands-on expertise in sensor fabrication through inkjet printing within the confines of a Class 100 cleanroom. The program not only deepened my understanding of complex forecasting in smart city networks but also honed my skills in Data Science and IoT.

My return to SRM IST is marked not only by a certificate but also by a renewed commitment to pushing the boundaries of theoretical research and practical experimentation. Beyond personal growth, this Faculty Abroad Program has laid the groundwork for future collaborations, fostering connections between the academic landscapes of the USA and India. The program has not just expanded my academic horizons but has set the stage for a future where knowledge knows no boundaries.



*Photo 1: Myself in front of WSU*



*Photo 5: Receiving appreciation and award from my mentor.*

During my stay in the USA, I contributed to the academic community by hosting a comprehensive session on Data Visualization for fellow researchers at WSU on Nov 3, 2023. The session aimed to elevate their grasp of proficient data presentation techniques. In acknowledgment of these educational efforts, I was delighted to receive a Certificate of Appreciation for my commitment to knowledge sharing. Furthermore, I was honored with an honorarium of \$250, reinforcing the value placed on disseminating expertise and fostering collaborative learning experiences.

This recognition serves as a testament to the importance of knowledge exchange and collaboration across borders, reflecting positively on the pursuit of academic excellence. As I integrate these experiences into my academic journey, I am optimistic that this Faculty Abroad Program has not only enriched my own academic pursuits but has also contributed to the broader tapestry of international collaboration in research and education.

# EXPLORING IOT IMPLEMENTATION AT CDAC CHENNAI

## IoT everywhere

On 6th of October, the students of the AC1 (Blockchain) section and AD2(Big Data) Section of SRM Institute of Science and Technology, Kattankulathur had the privilege of embarking on an educational journey to the Center for Development of Advanced Computing (CDAC) in Chennai. During this visit, we had the opportunity to interact with senior software engineers at CDAC, who introduced us to ongoing projects that exemplified the practical use of IoT in our daily lives.



Our learning experience was divided into two main components: a theoretical overview and practical exposure.

### 1. **Theoretical Session:**

In the initial segment of our visit, CDAC experts presented us with a comprehensive theoretical background on IoT. They explained the core concepts, the significance of IoT in the modern world, and its potential applications in various industries.

### 2. **Practical Exposure:**

The highlight of our visit was the opportunity to witness ongoing IoT projects at CDAC, which were being led by senior software engineers. Two remarkable projects were showcased:

#### a. **Automatic Fire Identifier and Extinguisher:**

We were introduced to an IoT system designed to detect fires in real-time and automatically trigger fire extinguishing mechanisms. This project showcased the potential to save lives and property through rapid fire detection and response.

#### b. **Automatic Luminous Effect of Light in Tunnels:**

The second project involved the use of motion sensors to control the luminous effect of lighting in tunnels. This not only enhances safety but also saves energy by ensuring that lighting is active only when required.





## Blockchain club activities

On October 18, 2023, the Arweave India Session took place from 1:00 pm to 3:00 pm at the iMac Lab C, 14th Floor, Tech Park. The event featured two Chief Guests: **Rohit Pathare**, known for strong interpersonal skills, adaptability, and a pursuit of International Software Testing Qualifications Board certification, and **Ashutosh Datta**, an operations associate at Arweave, specializing in Web3 and NFTs.

The session began with a comprehensive introduction to Arweave, followed by an engaging interactive Q&A session that allowed participants to actively participate. The discussions were highly interactive and covered various topics, including decentralized apps (DApps) and Layer 1 solutions (L1s). Further insights were provided on what distinguishes Arweave from platforms like Google and Azure.

The session delved into the unique feature of Arweave, which is the permanent and censorship-free storage of data, exemplified through real-world cases such as the China and COVID use case. **Dr. M. Lakshmi**, the Head of the DSBS department, briefly chaired the session. She extended a warm welcome to the participants, expressed gratitude towards the session heads, and shared crucial information about upcoming in-house projects on the campus.

The event also included a Q&A round where participants raised pertinent questions related to privacy concerns and the direct transfer of data. The Arweave India Session served as an informative and interactive platform for discussing this innovative decentralized protocol and its significance in the data storage landscape.



# INDIA GAME DEVELOPER CONFERENCE

Hyderabad



India Game Developer Conference (IGDC) 2023 unfolded as a vibrant tapestry of industry insights, technical marvels, and budding talent. Among the enthusiastic attendees were a group of bright-eyed SRM - B.Tech Gaming Technology students witnessing their journey was nothing short of exhilarating. The conference floor thrummed with the energy of industry maestros like **Mr. Ajay Kumar Srinivasan** and **Mr. Jainaressh BC**, whose expertise painted a vivid picture of the gaming landscape., it was a reunion with **Dr. Murugan Ambigapathy**, their GT program coordinator and a pillar of support in their career. **Dr R.Rajkumar** and **Dr. A. Sasikumar** supported the students in every possible way during this visit. Seeing these connections flourish amidst the bustling conference was a testament to the power of IGDC as a catalyst for growth.

But the true stars of the show were the SRM students. They weren't merely spectators; they were active participants, soaking up knowledge like sponges. Their insightful questions during talks, engaging discussions with peers, and valuable connections built with industry professionals showcased their dedication and potential. Witnessing their enthusiasm as they navigated the world of game development firsthand was a source of immense pride. Their experience at IGDC wasn't just about learning the latest trends; it was about planting the seeds of inspiration and ambition that will guide them in their future endeavors.

The India Game Developer Conference 2023 served as more than just an event; it was a microcosm of the thriving Indian gaming ecosystem. And at the heart of it all, SRM's brightest students, alongside their dedicated professor, proved that the future of gaming is in capable hands. The spark ignited at IGDC will undoubtedly lead them to create remarkable experiences that will captivate audiences for years to come.





# INDUSTRIAL VISIT - 2ND YEAR STUDENTS

**Bangalore - Coorg**



Industrial Visit for 2nd year DSBS students were arranged from 31/10/2023 to 3/11/2023 (four days) to Karnataka State.

119 students of 2nd year DSBS department were accompanied by Dr. T. Karthick, Dr. R. Jayaraj, Dr. G. Elangovan and Mrs. Anna Anbumozhi



Day 1: Students arrived in Bangalore and visited ISRO immersing in a dynamic industrial setting. Witnessed high-tech technologies, fostering a profound understanding of real-world applications. Engaged with professionals, gaining insights into the intricacies of space exploration and innovative technological solutions. An enlightening experience in the heart of India's technological hub.

Day 2: Visited Wonderla in Bangalore, a thrilling amusement park offering an array of rides and attractions. The park's vibrant atmosphere and diverse activities cater to all age groups. The high-speed rides, water slides, and engaging shows provided an exhilarating experience. Friendly staff and well-maintained facilities made it a memorable outing.

Day 3: Visiting Coorg was a mesmerizing experience. The Golden Temple, adorned with intricate Tibetan art, left a spiritual imprint. The enchanting Bamboo Forest offered a tranquil escape, immersing in nature's beauty. Evenings by the campfire added warmth to the chilly air, creating lasting memories of Coorg's natural wonders and cultural gems.

Day 4: Industrial visit to Heliosys Technology provided valuable insights into cutting-edge advancements. Exploring Mysuru's rich heritage and Chamundi Hills' panoramic views added cultural and recreational dimensions. The journey concluded with a return to Chennai, leaving the students enriched with knowledge and memorable experiences.

# WORDS OF ENCOURAGEMENT FROM A SENIOR SUCCESS STORY: INSPIRING JUNIORS

**OM RATHI ,RA2011027010173 , W2-BDA (Final Year) , Batch: 2020-2024**

**Faculty Advisor: Dr SV. Shri Bharathi**

Starting my journey at SRM Institute of Science and Technology, KTR campus paved the way for my career as a Software Development Engineer at BNY Mellon. SRM's education provided me with the foundational knowledge and skills necessary for this role.

BNY Mellon's interview process comprised three rigorous rounds. The first round assessed my resume, system design, and Object-Oriented Programming (OOP). The second round delved deep into my proficiency in C++, sorting algorithms, SQL, and Git. The third round was an HR interview, exploring my club involvement, internships, and completed projects.



To prepare for this challenging process, I turned to resources like GeeksforGeeks (GFG) for company-specific questions and relied on LeetCode for coding practice. Valuable tips from experienced seniors were instrumental in securing the position. Combining comprehensive preparation with guidance from teachers and colleagues, I successfully joined BNY Mellon as a Software Development Engineer. My journey reflects both my academic foundation at SRM University and my unwavering dedication.

**COMPANY PLACED: BNY MELLON**

**TOTAL COMPENSATION: INR 21,64,000**



**Shubham Prabhu ,RA2011027010099 , W1-BDA (Final Year) , Batch: 2020-2024**

**Faculty Advisor: Dr R. Radha**

Hello, I am Shubham Prabhu, final year CSE-BDA student. I have backed an offer at Wells Fargo.

While I was preparing for placements and internships, coding regularly and having strong fundamentals helped me in this a lot. Also, having basics strong in our curriculum subjects was also a big plus. In my interview I was asked about Computer Architecture, DBMS, OS and such related subjects.

Now, coming to my recruitment process, I had a resume shortlisting round, so as per my experience having good quality experiences like internships or projects matters more than quantity. Next, having good aptitude, verbal and coding skills helped me in sailing through the online test. Lastly, the topics mentioned above and a smooth conversation in the interview helped me during the course of this recruitment.



**COMPANY PLACED: WELLS FARGO**

**TOTAL COMPENSATION: INR 24,00,000**



# WORDS OF ENCOURAGEMENT: SIMENS INTERNSHIP SUCCESS STORY

**MUNAGALA NAGA SAI ,RA2111056010002 ,AA2 Section Data Science (Third Year)**  
**Faculty Advisor: Dr M. Rajasekar**



Siemens Student Programme(SSP) is an internship cum skill development programme launched by Siemens to provide students with opportunity to work with the skills developed and train with new skills parallelly.

The first round was an Aptitude test with very limited amount of time for every question. There were 3 sections in total. First was mathematical reasoning followed by verbal reasoning and lastly there was passage. This is only an aptitude test; no technical questions were asked.

The second phase was a one-one virtual technical interview with a time stamp of 30 minutes. The motive of this interview is to check the attendee potential in handling projects and fundamental concepts like OODP(polymorphism, inheritance etc ). The time stamp was equally utilized to balance building conversion, checking fundamental concepts.

The interview started with a brief introduction of both parties (student and interviewer). I was asked to show my GitHub profile later which a project was asked to be demonstrated. I was asked what and whys of the project, the idea behind the project, and justification of the solution developed. The interview continued with fundamental skills of Object-Oriented Programming. For example, one question goes like this: Q. What is compile time polymorphism, how do you achieve it and explain where it is used.

**INTERNSHIP OFFER: SIMENS**

**TOTAL COMPENSATION: INR 105,000 / 3 MONTHS**



## PLACEMENT STATISTICS

**8 MARQUE OFFERS (2024 BATCH)**

**HIGHEST PACKAGE OF  
32 LAKHS**



**SHASHANK PATEL**  
**RA2011042010141 / CSBS**  
**PLACED IN AMAZON**  
**CTC: 32 LPA**

**CONGRATS**  
 PROUD OF YOU!

Students Eligible for Placement	TOTAL OFFERS [As on Dec 31, 2023]
373	192







**Harsh Sharma**  
**Bachelor of Technology,**  
**Computer Science and Engineering with**  
**Specialization in Big Data Analytics**  
**Batch of 2019–2023**

**Now @ Barclays**

- Received the best student of the department award for academic and leadership qualities out of 200 people
- Secured Placement Offer + MITACS Global Research Internship in Canada (Fully Funded) for '22 Summer
- Secured SIIC (SRM Innovation and Incubation Centre) Funding for IOT-ML based Project
- Associate Tech Director at Data Science Community SRM
- Pre-Fellow at MLH Fellowship Summer '21,
- Class Representative for N2 Section from 2019 to 2023

I am excited to share the narrative of my educational journey, transitioning from SRM Institute of Science and Technology to the next chapter of my professional career at Barclays as DevOps Engineer. The impact of my undergraduate experience, particularly within the Department of Data Science and Business Systems at SRMIST, has been transformative.

During my pursuit of a B.Tech in Computer Science Engineering with a focus on Big Data Analytics from SRMIST (2019–2023), I was able to maintain a CGPA of 9.6 but also delved deep into various research areas of Deep Learning, including Natural Language Processing (NLP), Time Series Analysis, Multimodal Deep Learning, Graph Neural Networks, Contrastive Learning, and classical ML algorithms.

My proficiency in ML Frameworks such as PyTorch, Tensorflow, Keras, HuggingFace, and Transformers, coupled with expertise in Web Frameworks (API, Flask, FastAPI, Streamlit, HTML, CSS, Django basics) and Programming Languages (Python, C++), laid a solid foundation for my academic and professional endeavors.

I had the privilege of gaining hands-on experience through impactful internships and roles. For instance, as a Junior Data Scientist at Kalido, I optimized the Suggestions Engine Module of the Recommendations System via graph neural networks and contributed to the development of the Backend API using RabbitMQ and PostgreSQL. Another significant role was my stint as a Deep Learning (NLP) Intern at NeuralSpace, where I explored Neural Machine Translation and Document Categorization using BERT and transformers, deploying models using FastAPI on AWS.

Being equally passionate about research, I was able to secure prestigious MITACS GRI Research Internship at the University of British Columbia - Canada, securing a fully-funded position, where I developed Java bytecode language model pre-training pipelines for code to natural language translation on Microsoft's CodeSearchNET dataset.

These experiences culminated in the creation of impactful projects showcasing my ability to innovate and deliver real-world solutions.

In addition to my professional experiences, I actively contributed to research publications, including "Smart and Context-Aware System employing Emotions Recognition" (IEEE-INCET'21 Conference, May 2021) and "An effective Deep Learning Pipeline for Improved Classification, generation, and recommendation under Bloom's Taxonomy" (Springer - Education and Information Technologies, Oct. 2022, Impact Factor - 3.6).

My research journey continued with roles as an NLP Research Intern at Malaviya National Institute of Technology and ongoing work on Recommendation Generations using Multimodal Deep Learning at SRMIST.

Outside the classroom and the lab, my extracurricular activities were just as enriching. As the Associate Tech Director at Data Science Community SRM, I started as a Deep Learning Developer and progressed to oversee community events, manage projects, mentor juniors, and implement new ideas. Notable achievements include my pre-fellowship at MLH Fellowship Summer '21, where I collaborated on the TF-Watcher project, receiving the Best Project of the Pod Title. I also had the opportunity to contribute to prestigious global developer communities like Major League Hacking (MLH) and Microsoft Learn Student Ambassadors (MLSA).

Public speaking engagements, hosting sessions on NLP development, Git and GitHub handling, and presenting NLP overviews and transformer-based models to junior students, further added to my holistic educational experience.

I am grateful for the unwavering support and guidance from my professors and peers at SRMIST, which has not only prepared me for my current role as a DevOps Engineer at Barclays but also set the stage for my advanced studies and passion in development and research.

As I embark on this new phase of my academic and professional journey, I carry with me the technical prowess, research skills, and a unique perspective gained from SRMIST.

Thank you for being a part of my journey.

<https://harshgeek4coder.github.io/>

<https://github.com/harshgeek4coder>

<https://www.linkedin.com/in/harshsharma27>

# "UNLOCKING SUCCESS: THE POWER OF CONSISTENCY"

In an era filled with constant distractions and rapidly changing trends, the ability to stay consistent has become an invaluable skill for today's young generation. Consistency is the secret ingredient that separates those who achieve their goals from those who fall short. Whether you're striving for academic success, a healthier lifestyle, or mastering a new skill, here are some tips to help you maintain consistency:



1. **Set Clear Goals:** Define your objectives clearly and break them into smaller, achievable steps.
2. **Establish a Routine:** Create a daily or weekly schedule that includes time for your goals.
3. **Prioritize Self-Care:** Maintain your mental and physical health by getting enough sleep, eating well, and managing stress.
4. **Track Progress:** Monitor your achievements regularly to stay motivated.
5. **Stay Accountable:** Share your goals with a friend or use apps to track your progress publicly.
6. **Embrace Failure:** Understand that setbacks are part of the journey; learn from them and keep moving forward.
7. **Cultivate Patience:** Consistency takes time; don't get discouraged if results aren't immediate.
8. **Avoid Overcommitting:** Start with manageable goals to prevent burnout.
9. **Limit Distractions:** Minimize time spent on social media and other distractions that hinder your progress.
10. **Practice Mindfulness:** Develop a focused mindset to stay on track.
11. **Seek Support:** Surround yourself with a supportive network that encourages your consistency.
12. **Celebrate Small Wins:** Recognize and reward yourself for reaching milestones.
13. **Adapt and Evolve:** Be flexible in adjusting your approach if needed while maintaining your consistency.
14. **Stay Inspired:** Continuously seek inspiration and motivation to fuel your commitment.
15. **Never Give Up:** Remember that consistency is the key to unlocking your full potential.

**We are here to support and hear you.**

**K. Shantha Kumari**

**DSBS Students Counselling Cell: UB 4th floor; Room no: 1 | [counsellingcell.dsbs@srmist.edu.in](mailto:counsellingcell.dsbs@srmist.edu.in)**





# THINK DIFFERENTLY

Design thinking is a problem-solving approach that encourages creativity, empathy, and iterative problem-solving. Here are some design thinking innovative challenges for the readers:

## Enhance Personal Well-being:

- Design a mobile app that helps users manage stress and anxiety, providing personalized techniques and resources.
- Develop a platform that connects individuals with mental health professionals for online counseling and support.
- Design a tool or system that encourages healthy eating habits and mindful eating practices.
- Create a program or service that fosters a sense of community and reduces feelings of loneliness and isolation.

## Redesign Everyday Products:

- Redesign the standard backpack to make it more ergonomic, comfortable, and user-friendly for students or travelers.
- Reimagine the traditional bicycle to make it more sustainable, lightweight, and suitable for urban commuting.
- Redesign the standard umbrella to address common usability issues like wind resistance and portability.

## Improve Digital Learning:

- Design an AI-powered tutor that provides personalized learning experiences and adapts to individual student needs.
- Design a mobile app that provides real-time language translation to help students access educational content in different languages.
- Create a digital tool that helps teachers track student progress and customize lesson plans more effectively.

## Improve Lift Accessibility:

- Develop an app that allows users to request elevator assistance in advance and receive real-time updates on elevator availability.
- Create a system that integrates smart sensors to detect the presence of people waiting for elevators and optimize elevator dispatching.
- Design an inclusive wayfinding system for buildings that includes tactile maps, audio cues, and Braille signage.

**Drop your Design ideas to [atachronicle.dsbs.ktr@srmist.edu.in](mailto:atachronicle.dsbs.ktr@srmist.edu.in)**  
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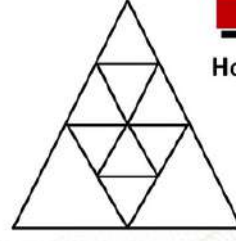




# IQ TEST QUIZ



Scan & answer



## Test Question

How many triangles do you see?

- A. 9
- B. 13
- C. 17
- D. 15

$$17 + \star = 56$$

$$\star - \heartsuit = 2$$

$$\square - 15 = \heartsuit$$

$$\triangle + \triangle = \square$$

$$\triangle = ?$$

A 37

B 52

C 39

D 26

# KURAL

## TIRUVALLUVAR'S TIRUKKURAL

பிறப்பொக்கும் எல்லா உயிர்க்கும் சிறப்பொவ்வா  
செய்தொழில் வேற்றுமை யான்.

கூளையிட - 972

### MEANING:

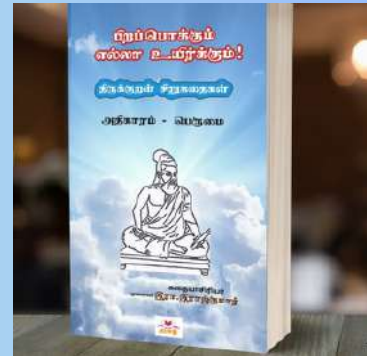
BY BIRTH ALL MEN ARE EQUAL. DIFFERENCES IN THEIR ACTION RENDER THEIR WORTH UNEQUAL.

### TAMIL (தமிழ்)

எல்லா மக்களுயிர்க்கும் பிறப்பியல்பு  
சமமானதே; தொழில் வேறுபாட்டால் பெருமை  
சிறுமை என்னும் சிறப்பியல்புகள் தாம் ஒரு  
போதும் ஒத்திருப்பதில்லை

### HINDI (हिन्दी)

सभी मनुज हैं जन्म से, होते एक समान । गुण-विशेष फिर सम नहीं,  
कर्म-भेद से जान ॥



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