

DATA CHRONICLE

OFFICIAL NEWSLETTER

DATA SCIENCE AND BUSINESS SYSTEMS

SCHOOL OF COMPUTING
SRM INSTITUTE OF SCIENCE AND TECHNOLOGY
KATTANKULATHUR



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Deemed to be University u/s 3 of UGC Act, 1956



SCHOOL OF
COMPUTING





SRM
INSTITUTE OF SCIENCE & TECHNOLOGY
(Deemed to be University u/s 3 of UGC Act, 1956)



**School of
Computing**



EDITORIAL MESSAGE

“The best and most beautiful things in the world cannot be seen
or even touched - They must be felt with the heart.”



It is a matter of great pride and satisfaction for the department of Data Science and Business Systems to bring out the News Letter ‘Data Chronicle’ Released from School of Computing, SRMIST. The Department has made tremendous progress in all areas academic, non-academics, capacity building relevant to staff and students. The Department has achieved another milestone in getting conducting many technical, intellectual and societal events for the betterment of Teaching, non-teaching and for skilled people. We are confident that this issue of the Department News Letter will send a positive signal to the staff, students and the person who are interested in the Technical education and Technology based activities.

A News Letter is like a mirror which reflects the clear picture of all sorts of activities undertaken by a Department and develops writing skills among students in particular and teaching faculty in general. I congratulate the Editorial Board of this News Letter who have played wonderful role in accomplishing the task in Record time. I express my deep sense of gratitude to the HOD under whose guidance this Technical work has been undertaken and completed within the stipulated time. Also my heartfelt Congratulations to staff members and Students for their fruitful effort.

We think, Therefore We are; Always Fortune favors the Brave!

Dr. B.Amutha
SCO-Newsletter - Head



COMPENDIUM

I

DEPARTMENT EVENTS

- Taiwan India Big Data living lab launch
- RAISE - CoE on Gaming Technology
- Technical Workshops
- Social Outreach programs

II

FACULTY ACHIEVEMENTS

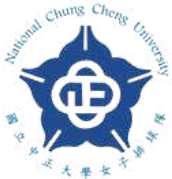
- Certifications by Faculty
- Publications and Patents
- Knowledge upgrading activities
- Notable achievements

III

STUDENTS NEWS

- Smart India Hackathon winners
- Placement Statistics
- Placement guidance by Seniors
- Mitacs Experience

LAUNCH OF TAIWAN-INDIA JOINT LIVING LAB ON BIG DATA ANALYTICS



Coordinator: Dr.G.Vadiuu



September 8, 2022,

Time: 10:00 AM onwards

Venue: 8th Floor, Room:UB813

A joint venture by CCU and SRM - Supported by Ministry of Science and Technology (MOST, Taiwan), Taiwan Teaching Education Centre, SRMIST



The goal of this Joint Living Lab is to foster technical collaborations between CCU and SRM students and professors. The following delegates from Taiwan felicitated the event : Mr. Baushuan Ger, Ambassador, Taipei Economic and Cultural Center in India (TECC), Delhi, India, Dr. Chin-Tsan Wang, Director of Science and Technology, Ministry of Science and Technology (MOST), Taipei Economic and Cultural Center (TECC), Delhi, India.,

Ms. Ellie Yi-Ting Chiang, Secretary, Division of Science and Technology, MOST, TECC, Delhi, India, Mr. Peter Chen, Director of Ministry of Education (MOE), Taipei Economic and Cultural Center (TECC), Delhi, India, Mr. Ben Wang, Director General, Taipei Economic and Cultural Center (TECC), Chennai, India, Dr. Pao, Professor, Department of Computer Science and Information Engineering, Director-Research Center on AI and Sustainable Development, National Chung Cheng University, Chiayi, Taiwan, Dr. Ren-Song Ko, Department of Computer Science and Information Engineering, National Chung Cheng University, Taiwan.

The slogan "Taiwan Can Help" has once again materialized into bilateral actions in cross-region partnerships. The progress on many on-going collaborative projects were discussed by students with the delegates. 35 students are part of the BDA Living Lab. The lab provides an excellent opportunity in addition to the regular academic activities to work with professors and students from CCU, Taiwan. The joint work broadens the student networking and application of their academic knowledge to solve real problems.



FACULTY DEVELOPMENT PROGRAM ON BIG DATA ANALYTICS LIVING LAB APPLICATIONS

Aug 5 - 12, 2022

Venue: 8th Floor, Room: UB813

Convenor: Dr.G.Vadiuu

Taiwan-India Joint Living Lab on Big Data Analytics, Department of Data Science and Business Systems, School of Computing, SRMSIT in collaboration with National Chung Cheng University, Taiwan

The Department of Data Science and Business Systems, School of Computing organized an FDP on Big Data Analytics Living Lab Applications by Taiwan-India Joint Living Lab on Big Data Analytics, Department of Data Science and Business Systems, School of Computing, SRMSIT in collaboration with National Chung Cheng University, Taiwan from August 5 to 12, 2022. (6 days). The following sessions were handled during the entire span of FDP:

- **Content-Based Image Retrieval using Machine Learning for large image databases** – Dr Jatindra Kumar Dash, Associate Professor, Department of Computer Science Engineering, SRM, Andhra pradesh
- **Big Data Analytics in Retail Market** – Dr Rajiv Senapati, Assistant Professor, Department of Computer Science Engineering, SRM, Andhra pradesh
- **IoT and Analytics for Smart Cities** – Dr. Rijo Jackson Tom, Lead Data Scientist, Augusta Hitech Software Solutions
- **Cyber Security Analytics in Healthcare industries** – Mr. Sakthidas, Principal Data Scientist, Ordr India Private Limited formerly known as Cloudpost Networks Private Limited.
- **A large-scale IoT visualized integration platform** – Dr. Ren-Song KO, Associate Professor at National Chung, Cheng University
- **AI in Bioinformatics** – Mr. A. Alkaff Ahamed, Ex-Bioinformatician at A*STAR, Software Engineer at Ceridian
- **Applications of Big Data Analytics in Healthcare industry** – Mr. Sai Sambasiva Rao, Alumni (M.Tech in Big Data Analytics), SRMIST
- **Infodemics: Big Data Analysis Systems for Government Prevention of Public Health Crisis** – Ms. Irfhana Zakir Hussain, Mitacs-Research Student, SRMIST
- **Deep Learning in Drug Discovery** – Mr. Brijesh Madhavan, CEO, Curvelogics ATS Pvt Ltd
- **Turning Big Data Research Challenges into Big Data Opportunities through Realities** – Ms. Nyasha, Big Data Analytics, Researcher, Zimbabwe
- **Healthcare – Scope of Machine learning in Digital Signal Processing** – Mr. Vibhor Saran, Data and Product | ex-Dozee, Bengaluru, Karnataka
- **Extraction of Factoid Answers on Internet Web** – Simbarashe Herbert Chaputsira, Senior Data Engineer – ICAP Zimbabwe



ACADEMIC COLLABORATION INITIATIVES OAKLAND UNIVERSITY, USA

Coordinator: Dr.M.Sangeetha

Prof.Vijayan Sugumaran is a Distinguished University Professor of Management Information Systems and Chair of the Decision and Information Sciences department at Oakland University. He is also a Co-Director of the Center for Data Science and Big Data Analytics at Oakland University.

He visited SRMIST on Aug 22,2022. An interactive session with the Professor, on the various academic collaborations available for the benefit of Undergraduate and Post-graduate students was arranged. Students posed various questions to the visiting professor which was clearly explained.



August 12,2022,
Time: 10.00 AM onwards,
Venue: TP, 4th floor. Room No:412



CENTRE OF EXCELLENCE ON GAMING TECHNOLOGY



August 25,2022
Time: 2.00 PM onwards,
Venue: 7th floor, Room No:UB705

RAISE -CoE on Gaming technology powered by MIT Square

Coordinators: Dr.A.Murugan,Dr.M.Saravanan Mrs Sindhu

Research, **A**rts & Application, **I**nnovation, **S**cience and Technology, **E**ntrepreneurship – RAISE.

The Center of Excellence on Gaming technology has been inaugurated with aim to focus the application of Gaming technology in various applications and research areas. This CoE is powered by MIT Square™. The function was presided by Dr.Revathi Venkataraman, Chairperson, School of Computing and Dr.M.Lakshmi HoD/DSBS. Ms.L.Bhuvaneswari, Co-Founder & Chief Operations @MIT Square, officially opened the CoE. Ms. Bhuvaneswari discussed about i10 activities that MIT Square will be supporting the students and faculty members.



DEEP VISUAL DATA ANALYTICS AND FUTURISTIC RESEARCH DIRECTIONS

September 1 & 2, 2022

Time: 2.00 PM onwards,

Venue: UB, 8th floor, Room No:815

Convenors: Dr. M. Prakash, Dr. P. Kanmani, Dr. S. Sharanya, Mrs. R. Radha



The prime objective of this 2 days workshop is to bring the experts from academia and Industry to share their knowledge pertaining to real-world applications. The first session is handled by Dr. Arulvalan, Associate Professor, NIT, Nagaland about the application of Machine Learning and Deep Learning techniques in handling problems pertaining to Computer Vision. Dr.Yuvaraj, Professor and Head of Artificial Intelligence and Data Science, KPR Institute of Technology gave a session on applying deep learning models in investigating building cracks and predicting the progression of damage through predictive analytics in the 2nd session.

The Second day of the workshop had hands-on session in deep learning solutions for computer vision and the resource person is Dr. Rijo Jackson Tom, Lead Data Scientist, Augusta Hitech Software Solutions, Coimbatore.

DATA ANALYTICS IN HEALTHCARE

September 14-16, 2022

Venue: UB, 7th Floor, Room No:705

3 Days workshop organized in association with University of California, Davis, USA and sponsored by SPARC

Convenor: Dr.A.Shanthini



The workshop on Data analytics in healthcare is organized with an aim to share the advancements possible in this domain to the participants. This workshop is executed in 6 sessions spanning over 3 days. First day is about Introduction to NLP, Knowledge levels in NLP, Implementing NLP Library for Bio Medical Entity Recognition, Archiving Concepts in clinical context and the resource person Dr.Divya, Sr Data Scientist, Dun and Bradstreet, Chennai shared her expertise. Sessions in Introduction to medical image processing, preparing data set for machine learning, Neural network and deep learning and Medical Image diagnosis is handled on Day 2 & 3 by Dr. Rijo Jackson Tom, Senior Engineer Innovation, Augusta HiTech Software Solutions, Co



VALUE ADDED COURSE ON WEB PAGE DEVELOPMENT

September 19-23, 2022

Venue: TP, 14th floor, iMac Lab

Convenor: Dr.N.Parthiban

The Second- and Third-year students of DSBS had an opportunity to brush up their skills in web page development technologies through the value-added course organized by Dr.N.Parthiban and fellow faculty team.

This course is conducted as a complete hands-on session that covered the following concepts through practical learning –

- Git 101
- Web Fundamentals
- HTML & CSS – Basics
- JavaScript – Beginner & Intermediate level
- Angular and React JS

At the end of the course, the participants are able to develop a personal webpage and publish the same in Github



BIGDATA ANALYTICS WITH HADOOP

September 29-30, 2022

Venue: TP, 14th floor, iMac Lab

Convenors: Dr.T.Veeramakali, Dr.A.Shobana Devi



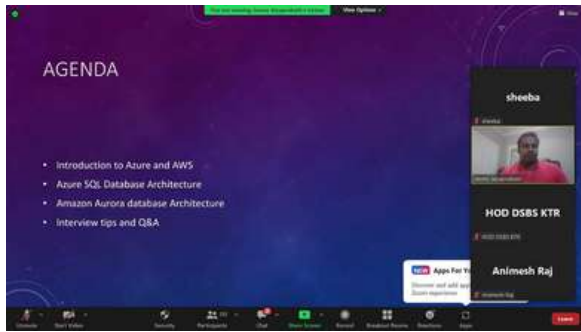
The workshop on Bigdata Analytics with Hadoop is organized with an objective to expose the participants with Industry required knowledge in Bigdata and its analytics. This workshop is executed in 4 sessions spanning over 2 days. Mr. Vijayan Sundaram, Big Data and Hadoop Administrator, Wipro Technologies Ltd. acted as the resource person and trained the participants in the following:

- Foundation of Big Data Analytics
- Introduction to Hadoop
- YARN Components-Resource & Node Management
- YARN Architecture
- Sqoop Import and Export
- Sqoop Architecture and processing
- Hadoop Ecosystem
- Big data Analytics and Applications

AWS AND AZURE

Aug 26, 2022 - Online event

Convenor: Dr. Paul T. Sheeba



Resource Person: Mr. James Jeyaprakash
Current Profile : Database consultant
 Amazon AWS
 USA

“Experienced leader in Database Management, Data Engineering and Cloud Computing in Azure and AWS. I have a passion for enabling data to empower business decisions and deliver data-driven insights. Industry expertise in Retail, Technology and Financial sectors on Database Management, Data Migration and Data Engineering”. ~ Mr. James Jeyaprakash

The speaker covered a wide range of topics such as VPCs, VPNs, Subnets, gateways and so on till so far. He kept the session interactive and let the audience come up with questions if they had any. With Cloud Computing at its prime, various cloud service vendors have contested to claim supremacy in the Cloud domain. AWS and Azure have been relentless and taken the top honors for a while now. He also touched upon interview processes and answered different types of questions that boosts the confidence of the listener. The program proved to be extremely informative for the students getting exposed to on-demand topics such as AZURE and AWS (Amazon Web Services).

OPPORTUNITIES IN DATA ANALYTICS

Convenor: Dr. Paul T. Sheeba

September 17, 2022

Venue: MBA Seminar hall

“Experienced Human Resources with a demonstrated history of working in the IT, Market Research, Analytics & BPM Industry. Leading campus recruitment across Pan India. Skilled in strategic recruitment, Management, Teamwork, and Leadership. Strong human resources professional with adequate recruitment knowledge”. ~ Mr. Collin Bruno

The talk mainly focused on the passion and desire towards the Job. In addition, the resource person highlighted about the importance of knowing about the Industrial requirements with respect to Data Analytics domain as well as the expectations of HR during the interview process.

As a final note, the resource person emphasized about knowing the ABC's of at least one technology and having a concrete understanding in domain as the student goes ahead with internships and placements.



Resource Person: Mr. Collin Bruno
Current Profile : Assistant Manager
 HR- Talent Acquisition
 D Cube Analytics

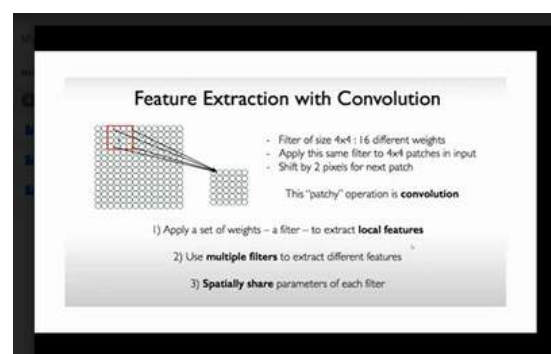
CONVOLUTIONAL NEURAL NETWORKS

July 29 2022 - Online event

Coordinators: Dr.K.Sornalakshmi, Mrs.R.Radha

The Alumni talk on convolution neural network and its application presented by Mr. Manish was an eye opener for the UG students and a path finder for PG students. The concepts starting from the very basics were explained with suitable examples. The use of classification, clustering, feature extraction and how it is useful in different areas to enhance our lives were elaborated extensively. The ways in which feature are extracted are also provided in a brief manner. The research gap was also presented to the students and also the path to proceed and select a particular problem statement was also presented precisely.

stryker



Resource Person: Mr.Manish Kumar
Alumni Batch : 2022 , M.Tech
CSE – BDA
Current Profile : Software engineer
Stryker Corporation
Hyderabad



THE POWER OF POSITIVITY

Aug 27, 2022 - Online event

Coordinators: Dr.K.Sornalakshmi, Mrs.R.Radha

iOPEX [Business Optimized]¹⁰⁰
TECHNOLOGIES



Resource Person: Mr.Prasanth Sreedhar
Alumni Batch : 2015 , M.Tech CSE
Current Profile : Senior Software Developer
iOPEX Technologies
Chennai

The session of “Power of Positivity” is the need for the hour topic for the aspiring final year students. The student community needs the vibe to stay positive and stay focused. The session by Prasanth provided the push and guidance the students needed to face the placement challenges or any challenge they face during their academic tenure. Accepting the flaws in once self is the greatest challenge and how to acquire that is what he has projected in the session. By staying positive we could motivate oneself as well as others around us.

He has also shared many of his personal experience with the students, he also provided insights on how to present oneself during interview process. It was a great self-motivation session by Prasanth.

DATA ANALYTICS TOOLS

Sep 12, 2022 - Online event

Coordinators: Dr.K.Sornalakshmi, Mrs.R.Radha



The presentation of Shiwani Joshi on "Data Analytical Tools" was a session planned to provide the roles and responsibilities of data analyst, as well on the difference between data analyst and data engineers. In addition, She presented a brief intro to all the latest tools used for analyzing the data. Furthermore, she provided a walk through on how to use them and when to use the tools and which tool has to be used for which process. This gave a platform for the students to interact with the person who herself being a data analyst and was able to provide a proper idea on which tools to learn. She also provided the resource links for various tools and encouraged students to use them extensively.



Resource Person: Ms Shiwani Joshi
Alumni Batch : 2019, B.Tech CSE
Current Profile : Data Engineer
KPMG Melbourne
Australia

CELEBRATING TEACHERS DAY -2022



Being one is the Highest Privilege, having one is the Best Blessing
Happy Teacher's Day



DE - CODE'22

September 23,2022

Organised by Blockchain club

De-Code was organised by Blockchain Club SRM to help students comprehend the relationship between blockchain and emerging technologies. More than 250 students attended the event on September 23, 2022, from 2:00 to 5:00 p.m. in the G N Ramachandran Hall of the Biotechnology Building. Sponsors of the event were Octalooop, Lumos Lab, and Roni Analytics. **Mr. Krishna, Blockchain Architect at Roni Analytics**, and **Mr. Chandrashekhar, Product Manager at Lumos Lab**, were the keynote speakers.

Mr. Krishna began by discussing the fundamentals of blockchain and its real-world applications and uses. The fundamental terminology associated with it were also expounded upon. In addition, he discussed Ethereum and how the firm where he holds the role of Blockchain Architect, Roni Analytics, addresses a few market-related issues. He concluded his speech by speculating on the future application of blockchain technology.

Mr. Chandrashekhar then addressed the audience with an interactive session about the operation of blockchain and its simulation. He stimulated the operation of several components of blockchain creation and mining with a simple online stimulation. After that, he discussed what web3 actually is and how businesses utilise it. Additionally, he discussed the scope of fully utilising the web3 space. There was a brief interval during which refreshments were delivered and the speakers rested. Students were extremely participatory throughout the entire event, and the keynote speakers enjoyed answering the students' intriguing questions. Many of the students found the topic of the keynote lecture to be quite fascinating and returned with new knowledge.

With a resoundingly favourable reaction, De-Code was a highly participatory event in which students learned more about the synergy between blockchain and technology as well as the potential for further application and advancement. Mr. Krishna and Mr. Chandrashekhar responded to the students' general questions on blockchain technology during a brief Q&A session held at the conclusion of their presentation.



DATA SCIENCE HACK 2022

September 1-4,2022

Jointly organised by Blockchain club with other communities

Data Science Community SRM, in association with the School of Computing SRMIST, The Enigma Club, and The Block Chain Club SRM is conducting a hackathon “Data Science Hack ‘22” on the 3rd and 4th of September 2022. With this event, we are focusing to enhance the student’s technical and problem-solving skills in a competitive crowd.

It is a 3-round hackathon, and this three-round hackathon aims at testing the participants on a holistic level including forming the code, hack, and presenting it in front of the esteemed judge jury. The event will be the first offline hackathon for our community and will help us provide the students with motivation and encouragement to perform, compete and spectate teamwork and leadership in flesh and blood. The result of this event is as follows: First prize (Rs 7000): Team Cadre Corps from SRMIST, Second prize (Rs 5000) : Team Stealth from SRMIST and Team Technyts from SRMIST and Third prize (Rs 3000) : Team Blazin Coders from Bishop Heber College.

Sponsors of the event were Learnnovators, Challas study abroad,Deufolio, Filecoin and Polygon.



iHUB Drishti game jam

September 23,2022

Motivated by Gaming Developers club

GDC SRM sent 4 of its representatives to compete in iHUB Drishti game jam taking place under the INAE Youth Conclave being held at IIT Jodhpur between the 15th-17th of September. The team fought tooth and nail and secured the fourth position in the game jam. The students who participated in this event are : Naman Alagh ,Shovit Jha,Ritik Srivastava and Siddhant Naik - all belong to III year B.Tech CSE with gaming technology specialization



AWARENESS ON CELLPHONE USAGE

August 24, 2022

Convenors: Dr.T.Veeramakali, Dr. Shobana Devi, Dr. Rajkumar

Government Elementry school, Kattur, Ninnakarai



August 24,2022 is a special day for SRMIST. It's our beloved **Founder Chancellor's birthday**. To make the day very much meaningful, DSBS Association shared its social responsibility at Government Elementary school, Kattur, Ninnakarai to make the young children aware about the cellphone and its damages.

Under the able guidance of Dr. M.Lakshmi, Professor and Head of DSBS department, Dr T. Veeramakali, Dr. A.Shobana Devi and Dr.R.Rajkumar visited the Government Elementary school, Kattur, Ninnakarai. The team delivered a special talk on the Cellphone usage and made the students aware of the damages through simple illustrations.

Our Chancellor's birthday is also celebrated as **Youth Empowerment Day**. It is important to empower our young children to grow as healthy and powerful youth. Aligning to this thought, our faculty team distributed organic sweets to young children assembled in the school and initiated the habit of healthy eating.

Around 200 students and their teachers got benefitted from this program. At the final session of the program, the school children were trained to do basic warmups and physical exercises to be followed on regular basics. The headmaster of the school thanked out DSBS Department and SRM management for constant support on outreach activities. They have given request to conduct many more events for the benefits of the children.

PANEL DISCUSSION ON CYBER CRIMES

September 2, 2022

State Panelists from SRMIST: Dr.A.Murugan, Dr.R.Rajkumar

Police Training Academy, Ashok Nagar, Chennai



Cyber-crime is worst daemon that eats up the hard-earned money of the people who are naive through unknown pits. Furthermore, at times Cyber-crime leads to fatal death. Hence, it is important to prevent these crimes to happen.

A panel discussion was organized by Tamil Nadu police department at Police Training Academy College, Ashok Nager, Chennai to discuss various strategies on preventing the cyber-crime effectively. Dr.A.Murugan, Professor and Program Coordinator of Gaming technology and Dr.R.Rajkumar, Assistant Professor of DSBS were invited to be technical panelists along with Cyber-crime experts, Cyber-crime police, National & Private Bank IT experts and media persons. The panel has discussed many issues and contributed following recommendations to RBI and Govt of Tamil Nadu:

- The unauthorized loan apps should be monitored
- Gambling mobile apps should be banned
- The panel should create awareness on online scams

The immediate outcome of the panel discussion is passing a bill in legislative assembly to ban Gambling mobile applications by Government of TamilNadu.

MOBILE PHONE BOON OR CURSE

August 20, 2022

Organised by Dr S. Ganeshkumar

SRM Medical college - Community Medicine Hall



Puthiyathalaimurai foundation and SRMIST jointly organized the Awareness programme on Mobile phones for public. DSBSs Association was invited to be part of this programme on August 20th, 2022, held at SRM Medical College Community medicine Hall. Prof.Dr.S.Ganeshkumar coordinated the event along with Puthiyathalaimurai foundation.

Dr.M.Lakshmi , Professor and Head of DSBS and Dr.S.Ganesh Kumar delivered their speech through video recording. Live sessions were handled by Dr. R. Rajkumar from DSBS and Dr. P. Supraja from NWC. The awareness programme is well received by the audience and common public. The interactive session after the expert talk provided the way for clearing many doubts. The speakers shared the details about various aspects for technologies and how they affect as well as support our day-to-day life. In the end, the Puthiyathalaimurai foundation in-charge, encouraged the public to use the mobile in constructive ways, specifically for education and entrepreneurship.



FIRST YEAR ORIENTATION - BATCH 2022

Organised by School of Computing

Sep 09, 2022

TP Ganesan Auditorium

Fresh Batch of students are here at SRMIST. Everything is new to them, and they were unaware of the treasure that is hidden in SRM. Hence, the faculty of School of computing with the guidance of our chairperson Dr.Revathi Venkataraman organized an orientation programme on Sep 9, 2022, that showcases every opportunity available for a student to become an entrepreneur or Employee of renowned industries, as wells opening the doors to study abroad through SRM banner. This programme platformed various clubs in SRM and its functionalities.

Dr.G.Maragatham, Professor at CINTEL department welcomed the gathering. The Chairperson, Dr Revathi Venkataraman addressed the students assembled and invited everyone to utilize the time @SRMIST effectively for their future. Dr.C.Prabu Shankar, Placement coordinator of School of Computing summarized the criteria that are needed to be fulfilled by a student to get their dream placement offers. Details regarding "Semester Abroad Program" was presented by Dr.S.Karthik, Associate Professor, CINTEL. The need of the hour – "Student well-being" was focussed by I Mrs.C.G.Anupama, Assistant Professor, CINTEL.

Dr G.Vadivu, Professor,DSBS introduced various Professional bodies in SRMIST, followed with the students club introduction by Dr.R.I.Minu, Professor, Computing Technologies . The Program concluded with the valedictory address from Dr.P.Supraja, Associate Professor, NWC



FIRST YEAR STUDENTS CAMPUS TOUR

September 6 & 7, 2022
Venue: SRMIST campus



Tech park



Basic Engineering Block



FAB LAB



Main Campus Garden



Central Library



Automobile hanger



iMac Apple Lab



SRM Innovation & Incubation Centre

Welcome to our DSBS Family



Dr. J Shobana



Dr. G Divya



Dr. S V. Shri Bharathi



Dr. A Chinnasamy



Dr. N Manikandan



Dr. R. Jayaraj



Ms. K. Panimalar



Dr. A. Siva Kumar



Dr. B. Prabhu Kavın



Dr. G. Premalatha



Dr. G. Elangovan



Dr. A. V. Kalpana



Dr. M. Monica Bhavani



**Our heartiest welcome goes to you.
Congratulations on being part of our growing and dynamic team here!
We're honored to have you with us!**

Teacher's Day Awardees



Dr.M.Lakshmi



Dr.S .Ganesh kumar



Dr.E.Sasikala



Dr. A. Shanthini



Dr.M.Prakash



Dr .D.Rajeswari



Dr .D.Hemavathi



Dr K.Sornalakshmi



Mrs.S.Sindhu



Mrs.S.Srividhya



Dr. T.Karthick



Dr.M.Sangeetha



Dr. S.Sudhakar



Dr.A.Shobana Devii



Dr. Paul T.Sheebai

Congratulations

Faculty Achievements - Certifications

Dr.A.Murugan	 Certified Trainer App Development with Swift	Apple iOS Certification
Dr.P.Saravanan		
Dr.G.Vadivu	Fundamentals of Deep Learning for computer vision	 DEEP LEARNING INSTITUTE
Dr.S.Sharanya	Building Real-Time Video AI Applications	
Dr.K.Priyadarsini	Getting Started with Enterprise-grade AI	
	Data Analysis with Python	
	Improving Healthcare: The Role of Cloud Computing	

Congratulations



Way to go Ahead

Post Doctoral Fellowship

Dr. S.Sharanya has received an offer to pursue post-doctoral research under the mentor Dr. JV Muruga Lal Jeyan from Aug 27,2022 in European International University. She is pursuing her inter-disciplinary research 'predictive maintenance' in aeronautical engineering and Computer Science. Her tenure spans for 2 years.



Dr. K. Priyadarsini has received an offer to do Post Doc Fellowship in the Washington State University, Vancouver, United States from Oct 23, 2022, titled "Develop novel machine learning algorithms to address challenges in sensor deployability".

Hurray !!! Cheers !!!



Publications and Patents

Compiled by Mrs.S.Srividhya

Department Coordinator, Faculty Publications & Patents

Publications

- **Dr.M.Ramprasath**, *"Deep Learning Based Autonomous Transport System for Secure Vehicle and Cargo Matching"*-Intelligent Automation & Soft Computing
- **Dr.T. Nadana Ravishankar**, *"A Novel approach for Data mining Classification using J48DT Classifier for Intrusion Detection System"*- IEEE 11th International Conference on Communication Systems and Network Technologies (Scopus Indexed)
- **Dr.N.Parthiban**, *"Construction of heterogeneous medical knowledge graph from electronic health records"* -Journal of Discrete Mathematical Sciences and Cryptography
- **Dr.N.Parthiban**, *"APX-Hardness and Approximation for the k -Burning Number Problem"*, Theoretical Computer Science
- **Dr.D.Rajeswari**, *"Identification of Illicit Activities & Scream Detection using Computer Vision & Deep Learning"*, IEEE Digital Explore
- **Dr. D.Rajeswari**, *"Analyzing Prognosis Methods using Machine Learning Algorithms for Detecting COPD"*, IEEE Digital Explore
- **Dr. M. Lakshmi**, *"Autonomous prediction of Type 2 Diabetes with high impact of glucose level"*,Computers and Electrical Engineering
- **Dr.A.Chinnasamy**, *"Chew's first Delaunay triangulation refinement scheme-based positioning of roadside units for optimal network coverage in vehicular ad-hoc networks"*- International Journal of Communication Systems
- **Dr.M.Prakash**, *"Enhanced Long Short-Term Memory for Early Alzheimer's Disease Prediction"*,Intelligent Automation & Soft Computing
- **Dr.S.Sudhakar**, *"Multi-Criteria Service Selection Agent for Federated Cloud"*-Journal of Communications Software and Systems
- **Dr.A.Shobana Devi**, *"Preserving the Privacy of Healthcare Data over Social Networks Using Machine Learning"* -Computational Intelligence and Neuroscience
- **Dr.K.Dhanasekaren**, *"An Extensive Study on Pretrained Models for Natural Language Processing based on Transformers"* - IEEE digital Explore
- **Dr.K.Dhanasekaren**, *"Meta-Learning Based Adaptive Crop Price Prediction for Agriculture Application"*-IEEE digital Explore

Publications and Patents

Compiled by Mrs.S.Srividhya
Department Coordinator, Faculty Publications & Patents

- **Dr.T.Veeramakali**, "Preserving the Privacy of Healthcare Data over Social Networks Using Machine Learning"-Computational Intelligence and Neuroscience
- **Dr.K.Priyadarsini**, "Recognition of the Multioriented Text Based on Deep Learning"- Expert Clouds and Applications, Lecture Notes in Networks and Systems "
- **Dr.P.Rajasekar**, " A 2.86-TOPS/W CMCB based Edge ML and RO-PUF engine for IoT based nano-electronic material applications" - Materials Today: Proceedings
- **Dr.P.Rajasekar**, "Experimental investigation of different unconventional machined surface on hardox steel", Materials Today: Proceedings
- **Dr.P.Rajasekar**, "Identification of Disease based on Symptoms by Employing ML", IEEE Explore
- **Dr.E.Sasikala**, "Task sequencing in heterogeneous device for improved offloading decision using optimization technique", Measurement: Sensors

(listed as per the date of publication)

Patents

- **Ms.S.Srividhya**, "A system and a method for forest fire prediction and mitigation"- IPR
- **Dr.P.Rajasekar**, "A Machine Learning based approach to analyse the network security of Medical Data using Blockchain " -Publication of the Patent Office, Govt.of India "
- **Dr.P.Rajasekar**, "Smart Autonomous Drone for Monitoring of a Modern Agricultural Field"-Publication of the Patent Office, Govt.of India "
- **Dr.S.Suchitra**, "A Secure Block Chain Based Agriculture Data Exchange and Monitoring System"-Intellectual property India, Guindy,Chennai"
- **Dr.A.Siva Kumar**, "IoT Enabled Energy Efficient Advanced 6gcommunication Network System" -Intellectual property India, Guindy,Chennai "
- **Dr.K.Shantha Kumari**, "A Blockchain based novel machine learning approach for smart health care framework"- Publication of the Patent Office, Govt.of India "

Knowledge upgrading series

- **Dr.J.Shobana** has participated in the two days' workshop on “Big Data Analytics with Hadoop” organized by the Department of Data Science and Business Systems, SRM Institute of Science and Technology, Kattankulathur held from 29th September to 30th September 2022.
- **Dr G.Vadiuu, Dr.A.Shanthini, Dr. Sharanya S and Dr.A.Shobana Devi** has actively participated in “National Workshop on Deep Learning for Video Analytics” conducted by Department of Computing Technologies, School of Computing, SRM Institute of Science and Technology, Kattankulathur in association with NVIDIA Deep Learning Institute during 22nd and 23rd September 2022.
- **Dr.J.Shobana** has participated in the Two Weeks International Virtual PDP on “Data Science : A Revelation of the Modern Digital Era”, organized by the Department of Computer Science and Applications (MCA), SRM Institute of Science and Technology, Ramapuram Campus from 29-08-2022 to 10-09-2022.
- **Dr. J. Jeba Sonia** has participated in the One Week Faculty Development Program on “Amazon Web Services (AWS)” during the period of 22nd – 27th August 2022 organized by the Department of Electrical, Electronics and Communication Engineering, School of Technology, GITAM, Hyderabad in collaboration with BrainOVision Solutions India Pvt. Ltd.
- **Dr.K.Priyadarsini and Dr. J. Jeba Sonia** has attended the two weeks International FDP on “Computer Vision and Natural Language Processing” organized by the Department of Information Technology, Easwari Engineering College, held from 08.08.2022 – 18.08.2022.
- **Dr.S.V.Shri Bharathi** has successfully completed the Short-Term Training Program on Programming for Problem Solving conducted by School of Computing, SRM Institute of Science and Technology, Kattankulathur in association with CodeTantra Tech Solutions Pvt. Ltd. during 27th July – 10th August 2022
- **Dr. Nadana Ravishankar T and Dr.J.Shobana** has participated in six days short term training program on “Artificial Intelligence for Computer Vision Applications – AICVA 2022” conducted from 25th – 30th July 2022, organized by Department of Computing Technologies, School of Computing, SRM Institute of Science and Technology, Kattankulathur.
- **Dr.S.Suchitra, Dr.K.Arthi, and Dr.J.Shobana** attended the Six days FDP on “Big Data Analytics Living Lab Applications” organized by Taiwan-India Joint Living Lab on Big Data Analytics, Department of Data Science and Business Systems at SRM Institute of Science and Technology, Kattankulathur, Chengalpattu Dist.-603203 held from 5-8-2022 to 12-8-2022.
- **Dr.K.Priyadarsini** has attended an online course on “Satellite Remote Sensing of Atmosphere” from 11-07-2022 to 15-07-2022, organized by ISRO.

Notable Achievements

- **Research Award:** [Dr.S.Suchitra](#), has been recognized for her enthusiastic participation in research activities and awarded "Best Indian Research-2022" in World Innovation Patent Conclave held from 26.8.2022 to 27.8.2022.
- **Best Paper Award:** [Dr.Paul T Sheeba](#) and [Dr.J.Jeba Sonia](#) presented a paper on Face Identification and Verification in Thermal Images which is selected as a best paper in the IEEE Third International Conference on "Intelligent Computing, Instrumentation and Control Technologies (ICICT-2022)" held at Vimal Jyothi Engineering College, Kannur(Dt,) -670632, Kerala, India on Aug 11th & 12th 2022.
- **Book and article Publication:**
 - [Dr.A.Shanthini](#), [Dr.G.Vadivu](#) published a book along with Dr. Gunasekaran Manohar, Data Scientist,UC Davis on "Deep Convolutional Neural Network for The Prognosis of Diabetic Retinopathy" as an outcome of SPARC project by Springer (ISBN: 978-981-19-3877-1)
 - [Dr. A. Shobana Devi](#) & [Dr.T.Veeramakali](#) has co-authored and published a book titled "Python Programming: A Modular Approach" by Scientific International Publishing House (SIPH).
 - [Dr.R.Rajkumar](#) published an article about Metaverse and its Future on The Hindu daily magazine on 27th July 2022
 - [Dr.R.Rajkumar's](#) article on 'India in Science and Technology growth' got featured in audio mode through All India Radio about on 28th August 2022.
- **Expert Lecture:**
 - [Dr.T.Veeramakali](#) and [Dr. A. Shobana Devi](#) acted as Resource Person in One-Day Hands-On Workshop on "Machine Learning Tools and Techniques" organized by Department of Computer Science Engineering, Jerusalem College of Engineering, Chennai.
 - [Dr.T.Veeramakali](#) delivered a guest lecture on "Foundation of Data Science" on 28.09.22 organized by the Department of Computer Science Engineering, Sai Ram Institute of Technology, Chennai.
 - [Dr.R.Rajkumar](#) delivered a lecture on AR VR in Teaching at BNM Institute of Science and technology, Electronic City, Bangalore on 15th July 2022.
 - [Dr.R.Rajkumar](#) delivered a lecture at Workshop on STEMM for Department of Science and Technology (DST), Govt of India at Royal Park School, Salem on 17th July 2022.
 - [Dr.R.Rajkumar](#) delivered his expert lecture at ISTE Sponsored Short Term Training Programme on Deep Learning Tools and its applications on 29th July 2022
 - [Dr.R.Rajkumar](#) delivered a lecture at the one-day workshop on Intellectual Property Rights, Patents | Copyrights, Trade Secrets, Traditional Knowledge at Sri Krishna College of Engineering and Technology, Coimbatore on 11th September 2022.
 - [Dr.R.Rajkumar](#) delivered a lecture at AICTE Sponsored ATAL-FDP on AR-VR Application in Civil Engineering Applications at Poornima Institute of Technology, Jaipur, Rajasthan on 14-15 Sep 2022.
 - [Dr.R.Rajkumar](#) delivered a lecture at one day workshop on AR VR for engineering applications to VIT University - Chennai Campus on 17th September 2022.
 - [Dr.R.Rajkumar](#) delivered a lecture one day workshop AR VR for Tamil Computing applications to SRM Valliammai Engineering College on 27th September 2022.

Notable Achievements

- **Mahindra Research Valley Training:**
 - Mahindra Research Valley (MRV) - Mahindra & Mahindra has requested SRMIST to host the intensive training program for their trainees at our premises. Department of Automobile engineering organized the aforesaid training program. As part of the 30 days training, the trainees are exposed to the basics of Data science.
 - Dr.A.Shanthini, Dr.M.Prakash, Dr.P.Kanmani, Dr.S.Sivasankari and Dr.A.Shobana Devi delivered various lectures and Dr.K.Dhanasekaran, Dr.Jeeva, Dr.S.V.Shri bharathi assisted the trainees during the lab session.
- **Program committee Member at International conference:** Dr.J.Jeba Sonia is serving as Program committee member at the 1st International Conference on Artificial Intelligence: Theories and Applications (ICAITA22) November 07th - 08th 2022 Mascara, Algeria
- **Judge Invite:** Dr.S.Suchitra and Dr.K.Arthi are invited as judge for the WebFab (Website Creation) competition in the ongoing series of events that are being conducted by the NWC Association and IoT Alliance and IoT Alliance (An AICTE SPICES-funded club) on the 24th of September 2022.

Faculty Refresher and Assimilation Programme - FRAP 4.0



FRAP 4.0 is the faculty orientation program that helps the newly inducted teachers get familiarized with the SRMIST's academic and other activities. The DSBS Department newly joined teachers participated in the 4th edition of FRAP and got benefitted.

Winners @ Smart India Hackathon-2022



SIH 2022 brings the next generation evolution by inclusion of new methodology to inculcate the culture of startup and innovation ecosystem across different age groups. Three student teams comprising our DSBS students won accolades for their innovative solutions to the challenges posted by SIH team. We congratulate the students and their mentors for the feat displayed at the SIH Finale on Aug 25 and 26, 2022.



Matrix United

Vedant Singh (Team Leader)

III year, B.Tech CSE with Gaming Technology

Mentor : Dr. P.Saravanan

First Prize with 1 Lakh cash reward

Challenge solved: Education ecosystem for specially abled students need provisions and/or improvements to take care of compliance, governance and conduct. (RK977)

Lazy Singletons

Nishnata Debnath(Team Leader),Krishna Priya

Hardik Srivastava

IV year, B.Tech CSE with Big Data Analytics

Mentor : Dr.T.Karthick

First Prize with One Lakh cash reward

Challenge solved: e-buddy for rescued child labour (DH1042)



The Squad 69

Shaswat Srivastava (Team Member)

IV year, B.Tech CSE with Big Data Analytics

Third Prize with Rs 25000 cash reward

Challenge solved: Deep Learning based Cyclone Intensity estimation using INSAT-3D IR imagery (SS591)



DSBS Placement Score Board



Marquee Placement is all yours

Sashrika Suriya
RA1911027010092
CSE-Big Data Analytics
Placed in Wells Fargo, MotorQ- Marquee



It is never too early to start thinking about placements.

Our college's placement season comprises of companies coming in different categories: Dream, Super Dream, International and Marquee. The last category is often the most sought after, as they provide packages above 20 LPA. Cracking Marquee companies is not hard, all you need is consistency and a little bit of focus! Let us go over the entire placement process, and how we can improve ourselves at each step of the way.

The process can be divided into three main steps: Shortlisting, Technical Test, Interviews. In this article , I have mentioned some preparation steps and tips.

Marquee Placement is all yours

First Step : Shortlisting

In this step, either the company or college will shortlist candidates who are eligible to sit for the company. This shortlisting has various parameters. In order to qualify, one needs to get good Cumulative Grade Point Average (CGPA) and a good profile. A Github account filled with interesting projects, participation in hackathons and other Open-Source competitions, internships, research projects are all factors which count towards a good profile.

Second Step : Technical test

This is a test conducted to gauge your knowledge of Computer Science fundamentals which includes topics like Operating Systems, Database Management, Object Oriented Programming, Computer Networks. These are all courses provided in the curriculum, ensuring a strong base in these subjects means you are much closer to qualifying for the interview!

Besides the curriculum, practice coding questions on the websites like LeetCode and HackerRank. The coding test may also include analytics and questions specific to the type of work the company does. For example, a company working in the financial sector might have questions specific to the field. Doing some research about the company before the test is always a good idea!

Third: Technical interviews

Usually, interviews are of two categories: Computer Science Fundamentals round and Data Structures round. A CS fundamentals round is like the fundamentals section of the test. If you revise your curriculum, you can sail through this round. The DS algorithm round is usually a live coding round. You will be given a question and asked to code the solution on a live code-sharing platform. This is a crucial round and requires practice.

Here, the interviewer is not just looking for your ability to solve the question, but to do it methodically. Keep a continuous flow of conversation between yourself and your interviewer. Start with a brute force approach and keep explaining whatever you are thinking. Do not hesitate to speak, and be open to any guidance the interviewer provides. If you are going in the wrong direction, it is better to find out 10 minutes into the interview, rather than 30 minutes later, when you do not have time to correct your approach. At the end of the interview, always ask questions to the interviewer about the company, and request for feedback on your performance.

The entire process may seem daunting at first look, but if you break it down into parts, you will realise that all you need is consistency. When placement season comes around, you will be ready if you study hard in your coursework, cooperate with professors on projects, and take part in the many technical groups and clubs at our campus.

How to prepare for Placement?

Chirag Bengani

RA1911027010002

CSE-Big Data Analytics

Placed in Swiss Re-Super Dream



Greetings to everybody!

The placement season is the most eagerly anticipated and exciting time for a college graduate. The majority of our college students choose placement, which denotes greater competitiveness. I'll provide a thorough description of the various placement preparation tools in this article. I'll start by talking about the topics you should pay close attention to. Although they might not be your favourites, these topics come up most frequently in both online examinations and face-to-face interviews.

The first and most important subject is **Data Structures and Algorithms**.

- These include time complexity, space complexity, Linear & Binary searching, sorting in linked list, dynamic programming and divide and conquer.
- Having both the concept and the code clear is a very big advantage you can make for yourself and the earlier you start, the better for you.
- Your syllabus for DSA and DAA covers the basic concepts, so be sure to pay attention in those classes and get your doubts resolved.
- Also, remember it is never too late to start, so just nudge yourself to do that bit more and you will be able to see the results, slowly but surely.

NOTE: The topics mentioned here are just to provide overview about the concepts you should be thorough with. So have a glance of all the topics that were covered in your syllabus.

The following subject or idea on which you must focus is **Operating System**.

- Topics like basic commands, allocation algorithms, concepts of deadlock, memory management (includes a little bit of problem solving).
- People aiming for marquee companies make sure to have a good understanding of the subject.

The next subject or idea on which focus has to be provided is **Database Management System**.

- Basic DDL, DML, TCL, DCL commands should be thorough both conceptually and coding wise.
- Hands on experience in joins, structured query, inbuilt functions is an added advantage.
- Knowledge on triggers and stored procedures will be helpful for roles related to analytics.

The next topic involves **Computer Networks**

- Knowledge of OSI model including all functions of the layers.
- Knowledge of components of network like switches, hubs, routers etc.

How to prepare for Placement?

NOTE: The topics mentioned here are just to provide overview about the concepts you should be thorough with. So have a glance of all the topics that were covered in your syllabus.

Other additional topics that will be handy during placements are:

- **General Aptitude:**
 - Student should be well versed concepts involving percentage, profit and loss, number theory, AP & GP, simple and compound interest etc.
- **Verbal Aptitude:**
 - Error correction, error detection, passage reading, synonyms & antonyms, fill in the blanks, find out the meaning of words will be important concepts asked during online test.
- **Logical Reasoning:**
 - Pattern matching, decrypting code word, finding the relation, odd-one-out, number series etc. are some of the topics asked under this section.
- **Programming:**
 - There will definitely be at least one or two questions where students have to code for a problem in their choice of programming language.
 - Mostly the programming questions involve DSA related problems (like string matching, longest common subsequence etc.)

Interview: General Guidelines to be followed while giving the interview (Online or Face to Face)

- Be thorough with your resume
- Introduce yourself clearly in a professional manner
- Mention topics only on which you have complete confidence
- Do not bluff. A blank resume is better than a lie.
- Expect cross questioning on every statement you make.
- Finally, be calm and give the interview. Your calmness under such a situation is what makes you stand out.

Resources:

Online and Offline resources both will help you prepare to face the placement season. Offline resources include your notes in class, which act as quick revision notes at the end just before the test.

Online resources include w3schools, GeeksforGeeks, Tutorialspoint, Interviewbit, YouTube for notes and references. Leetcode, and Hackerrank and Hackerearth are platforms you can use for sharpening your coding and problem-solving skills. IndiaBIX can be used for aptitude preparation. Even GeeksforGeeks and FACEprep have aptitude preparation resources. Cheat sheets also are important to revise all important concepts at the last minute for a quick glance.

Placement is eazzyyyy

A.Prithivi

RA1911027010052

CSE-Big Data Analytics

Placed in Infocusp Innovations-Super Dream



Hello everyone.

I get that you all are really nervous for placement and stuff. You might be stressing yourself out, getting depressed and I'm not here to tell you not to get depressed but to help you out with my experience.

Ok so first things first, **you need to do DSA**. Don't care if you have 1 month left or 1 week left. Just start doing DSA. There are 2 things here.

1. Learn about how the data structures basics, how they work etc.
2. DO problems.

Just go to **leetcode** and start doing problems. Trust me if you are spending like 45 minutes on a so easy problem and still no finishing the answer. That's how you know you are learning. As you do more, you start to identify patterns and you will become faster. But remember if you are not able to do a single problem it doesn't mean you suck. It just means you are slowly learning if you keep at it.

Ten you will need to be very familiar with everything you put in your resume. If you put ML or C++ or something. They are going to ask you from the basics to the complicated topics. They will ask questions on even the tiniest thing in your resume so make sure you have confidence to answer questions on it if asked.

You also need to prepare a bit if system design networking, OS, DBMS. Knowing the basics and important concepts will be enough

When you are first going into a job you are gonna know absolutely nothing. I'm working as a half data engineer half data analyst in retail and trust me, I didn't understand a single words in my first meeting. You just build it along the way. I've also learnt that communication is a key part of any job. You need to be good at communicating your thoughts. I would even say it's a lot more important than your coding skills.

You might also ask what exactly I use in a day-to-day job as there are so many tools. SQL is like the single most important thing. Querying data for others in the way they want it, modifying errors, reporting you need SQL for everything. I have learnt a lot in my job, new design methods, how to approach problems in order to solve them, how to work in a team etc.

MITACS Research Experience

Hardik Srivastava
RA1911027010021
CSE-Big Data Analytics
Mitacs 2022 - Intern
Placed in JP Morgan Chase & Co.



Hi, I am Hardik Srivastava; a final year undergraduate student majoring in Computer Science Engineering with a specialization in Big Data Analytics at SRM Institute of Science and Technology, Chennai, India. I got selected for the Mitacs Globalink Research Internship at **McGill University (Q.S. Ranked 21), Montréal, Québec, Canada for the Summer of 2022**. Mitacs Globalink Research Internship is a competitive initiative for international undergraduates where, every year, top-ranked applicants participate in a 12-week research internship under the supervision of Canadian University faculty members in a variety of academic disciplines.

I got internship in the **Accessible Computing Technologies (ACT) Laboratory** and worked closely with **Dr. Karyn Mofatt** and one of her Ph.D. students. The ACT Laboratory at McGill University aims to develop a new generation of assistive devices and accessible technologies that are sensitive to social environments. The project mainly focused on **Human-Computer Interaction Research (HCI)** and aimed at Developing an **Intelligent Mobile Computing Alternative and Augmentative Communication (AAC) Application** for people with disabilities. My professional assignments revolved around the Design, Development, and Integration of the various AI-based Language Modeling and Generation Subsystems with the existing main application. It was a great opportunity to have been able to contribute to the ongoing research.

Working in a diverse team setting on a challenging project has strengthened my skills significantly. The day-to-day interactions with other researchers and faculties on a technical front greatly helped me refine my Problem Solving and Algorithm Design, and Analysis skills. Finding the solution to the root cause of the problem whenever you're stuck is what is expected from you. It is this work culture that inculcated a sense of technical maturity in me and helped me contribute effectively to developing a fool-proof and robust system as a result of my assignments. This would be the biggest takeaway for me.

On the personal front, working and interacting with such diverse teams not only helped me develop my communication skills but also work on my interpersonal and intrapersonal skills. Believe me, one of my major takeaways from this internship is that you will be forced to get out of your comfort zone and push yourselves to unknown boundaries.

To summarize, this is one of the best opportunities in the world for a growing researcher to obtain international work exposure and collaborate with some of the best researchers in academia. It will provide you with a chance to contribute to some interesting and real-life research-based projects.

I wish you all the best for your upcoming Mitacs Globalink Research Internship application and the journey ahead.

Feel free to connect with me on LinkedIn: <https://www.linkedin.com/in/hardik-srivastava-2911hs/>

HPAIR 2022 conference Experience

Aakriti Kinra
RA1911027010053
CSE-Big Data Analytics
HPAIR 2022 Participant



This is Aakriti Kinra here

Please find below my summary of the HPAIR 2022 conference along with my offer letter and certificate

The Asia Conference (ACONF) 2022 of the Harvard College Project for Asian and International Relations (HPAIR) is Harvard University's largest annual student conference in the Asia Pacific. This year the conference was held in New Delhi, India, from 20th to 24th August 2022. I attended the conference virtually, and my experience was life-changing.

I learned a lot of invaluable lessons and connected with people from around the world. I even listened to renowned speakers, including policymakers, founders, CEOs, and actors. This allowed me to look at issues from a global perspective and grow beyond the boundaries of conventional thinking. The events organized during the four days of the conference provided the delegates an opportunity to network and connect with others, including the speakers and the organizing committee. The international and desi night allowed the attendees to submerge themselves in other cultures as they mingled with fellow delegates, speakers, and staff.

Overall, the conference helped me build lifelong connections and share ideas with them. I have been exposed to various fields, and my knowledge and experience grew exponentially by attending the conference. I would encourage all to attend the next edition of the Harvard Project for Asian and International Relations International conference (HPAIR).



Complications faced by A Data Scientist

Godfrey Aswanth
RA2112704010020
M.Tech(Intg)CSE -
Data Science Specilization



Data science is a profession which requires a lot of skills to achieve the task given.

In today's business landscape, data science has become almost ubiquitous and is steadily gaining control over the tech field. With a massive amount of data being generated on a regular basis, a huge number of organizations are trying to leverage the power of data science. The hardest challenge faced by data scientist while examining a real-time problem is to identify the issue. They have to not only understand the data but also make it readable for the common man. The insights from the analysis should remove the major glitches and hiccups in the business. Sometimes in data science, unexpected results may be obtained which may or may not be the end with the rightful conclusions. In such a challenging situation, a data scientist should press on supervised learning for future exploration, model selection and appropriate selection of algorithm. With sufficient time and power, a data scientist can generate models of predictive strength having little interpretation.

Despite the importance that analytics and data science technologies have created for themselves, there is still a need to explain the end users about how accumulating and analysing the right data can be useful. Most analytics leaders believe that it is one of the biggest challenges to educate people about what data can do for you. On data science related projects, multiple departments like the engineering department, data science department etc generally work together and thus, it's extremely necessary to collaborate and define clear expectations and boundaries to avoid complications down the line. A common problem often faced by data scientists is facilitating cooperation between multiple departments on how data needs to be collected and interpreted. The lack of harmony between teams often leads to inaccurate collection and analysis of data. It's extremely important for data scientists to have the right type of data to make an analysis accurate. And obtaining access to a diverse range of data in the appropriate format isn't only difficult but time-consuming as well. There're different types of avenues from where issues could arise from insufficient volume of data to hidden data to less variety in the type of data. However, the responsibility of curating data comes up to data scientists in order to leverage the full potential of data science.

As the analytics industry is still evolving, many analytics leaders believe that there are not a lot of use cases that actually exist out there. It is a challenge to identify correct data for the appropriate analytics use case. If the right set of data is not identified for a specific use case, there are chances that insights may be incorrect. It may become difficult for them to do a lot of things by themselves such as inspect the content and convince people to adopt it, especially if it is being done for the first time in an organisation. The challenges in the data science field will always be there and often seem to be intimidating but most of them can be averted with proper communication and enough preparation.

Jeffrey Ullman Research Colloquium

Jeffrey Ullman Colloquium has been initiated with the aim of researching effectively among the Research Scholars of Department of Data Science and Business Systems. Weekly seminar series are conducted among the Research scholars and the Faculty members.

Image processing techniques using MATLAB

Name : Mr Vasudevan

Supervisor Name : Dr.T.Karthick Date : 09/07/2022

Effective techniques for processing digital images include using algorithms and tools that provide a comprehensive environment for data analysis, visualization, and algorithm development. Digital image processing is the use of computer algorithms to create, process, communicate, and display digital images. Digital image processing algorithms can be used to: Convert signals from an image sensor into digital images, Improve clarity, and remove noise and other artifacts etc.,



Machine learning techniques

Name : Mr.S.Praveen Kumar

Supervisor Name : Dr.T.Karthick Date : 16/07/2022

Machine learning uses two techniques: supervised learning, which trains a model on known input and output data to predict future outputs, and unsupervised learning, which uses hidden patterns or internal structures in the input data. Supervised learning uses classification and regression techniques to develop machine learning models. Clustering is a common unsupervised learning technique.



How to write a research paper

Name : Mrs.Subashini.B

Supervisor Name : Dr.Hemavathi Date: 23/07/2022

1. Understand the assignment and set a schedule
2. Finding a topic and question
3. Begin research
4. Form a skeleton for the research paper
5. Write a rough draft
6. Write a final draft



Jeffrey Ullman Research Colloquium

Various algorithms used in machine learning

Name : Mr.Blessed Sam

Supervisor Name : Dr.Prakash Date : 30/07/2022

Machine learning algorithms discussare:

Linear regression , Logistic regression ,Decision tree
SVM algorithm ,Naive Bayes algorithm, KNN algorithm
K-means ,Random forest algorithm
Dimensionality reduction algorithms
Gradient boosting algorithm and AdaBoosting algorithm



Time and Space complexities

Name : Mr.Balachander.S

Supervisor Name : Dr.Murugan A Date : 27/08/2022

The quantity of operations required for an algorithm to do its task is referred to as time complexity. When discussing an algorithm's or program's overall memory usage, including the space utilized for input data during execution, the term "space complexity" is often employed.



Introduction to deep learning

Name : Ms.Swetha.V

Supervisor Name : Dr.Vadiuu.G Date : 03/09/2022

A larger family of machine learning techniques built on artificial neural networks and representation learning includes deep learning. Unsupervised, semi-supervised, and supervised learning are all possible.



Jeffrey Ullman Research Colloquium

IoT with health care sensors

Name : Ms.Saranya R

Supervisor Name : Dr.Murugan A Date : 10/09/2022

IoT in healthcare has different sensor devices such as pulse-oximeter, electrocardiogram, thermometer, fluid level sensor, sphygmomanometer (blood pressure) that read the current patient situation (data).It is used in many applications such as, Heart-rate monitoring,Hand hygiene monitoring,Depression and mood monitoring,Parkinson's disease monitoring



Basics of Visualization

Name : Ms.Gayathri

Supervisor Name : Dr.Kavitha.G Date : 17/09/2022

The graphic display of information and data is known as data visualization. Data visualization tools offer an easy approach to observe and analyze trends, outliers, and patterns in data by utilizing visual elements like charts, graphs, and maps.



Deep learning concepts with image classification

Name : Ms.Anna Anbumozhi

Supervisor Name: Dr.Shanthini.A Date: 24/09/2022

AA model is trained to detect the target classes (things to identify in images) using labeled example images. Image classification is a supervised learning problem. The input for early computer vision models was simply raw pixel data.





SRM
INSTITUTE OF SCIENCE & TECHNOLOGY
(Decreed to be University u/s 3 of UGC Act, 1956)



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திருக்குறள்

Thirukkural

வான்நின்று உலகம் வழங்கி வருதலால்
தான் அமிழ்தம் என்றுணரற் பாற்று.

உரை

உரிய காலத்தில் இடைவிடாது மழை பெய்வதால்தான் உலகம் நிலைபெற்று வருகிறது; அதனால் மழையே அமிழ்தம் எனலாம்.

Meaning:

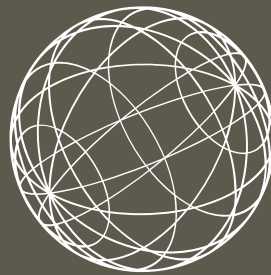
The world its course maintains through life that rain unfailing gives;
Thus rain is known the true ambrosial food of all that lives

- Tiruvalluvar (2000 Years ago)

DATA CHRONICLE

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