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# **ABOUT THE DEPARTMENT**

Department of Networking and Communications under School of Computing provides quality and value-laden education for students in the traditional and contemporary areas of Information Technology, Networking, Cloud Computing, IoT and Cyber Security. The department moulds students with good ethical practices, thus showcasing their all-round personality development. The department consists of a medley of faculty members with industrial and academic experience. Research in the department focuses on creating and evaluating innovative learning experiences, inspired by educational principles and technical progress.



### **Vision**

To nurture as globally recognisable department in imparting the students high quality education and providing high confidence, unique knowledge and research experience in the field of networking, cyber security, forensics, information technology, cognitive computing and internet of things.

### **Mission**

- ▶ To provide world class IT professionals with appropriate industry and research based curriculum
- ➤ To train the students in such a way that leads to entrepreneurship and develop societal need based industries
- ➤ To nourish the students as socially responsible professionals by providing them training in personality development, ethics and leadership program

### MESSAGE FROM CHAIRPERSON



Dr. Revathi Venkataraman

Today, we are aware of the fact that networking impacts everything and undoubtedly digital technology has made it increasingly feasible for hybrid networking. We intend to meet the expectations of the aspiring students and to add more value to the degrees offered. The Department of Networking and Communications ensures its students to focus and upskill the fast-growing networking technologies in Cloud, Computer Networks, Cyber Security, Information Technology and Internet of Things. The programs are introduced in partnership with reputed IT companies like Amazon Web services, K7 Security, Virtusa. The Department's keen focus is towards "networks" domain specific and specialization based placement drives for its students. We inculcate entrepreneurial skills in budding aspirants to pitch their innovative ideas through SRM Innovation and Incubation Center. Our International and alumni connect intrigue in bridging the gap between the trio: academics -industry-research.

The School of Computing strives to give an adaptable, gender-equitable education system and forward-thinking mindset in an era of disruptive change for its students.

We look to fulfil their dreams as Meritorious Professionals of the future!

Dr. Revathi Venkataraman
Professor & Chairperson
School of Computing
https://www.srmist.edu.in/computer-science-engineering/chairperson-message

### MESSAGE FROM HOD



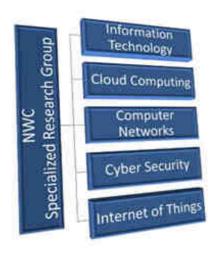
Dr. K. Annapurani

Networking and communications are related with every part of our daily routine - Be it for business, entertainment or research purposes. The technological advancements in the field have pushed the boundaries to get us high-speed internet, online commerce, live streaming, the social networks and so on. With the virtuous and dedicated team, we inculcate the young minds to further push these boundaries for leading the path into next generation. Along with the technical knowledge, we staunchly believe that moral and ethical values also shape up not only a strong, confident professional but a great leader. We arm our students with not only our cumulative knowledge of ever-changing digital field but also the wisdom of our experience to make it big in this competitive world.

A special thanks to my entire team for conceiving this concept and making it a reality. Looking forward for our many more successes.

Dr. K. Annapurani Professor & Head Department of Networking and Communications

# **RESEARCH**



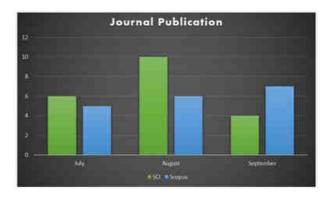
### **Specialized Research Group**

Department of Networking and Communications has started a Specialized Research Group (SRG, sometimes known as a research centre) is a collection of researchers from the same faculty who collaborate on a certain problem or topic. Researchers from the same school/subject or from other disciplines within a faculty might form research groups.

https://sites.google.com/srmist.edu.in/deptnwc

#### **Publications**

Our faculty members have published 18 research papers in Scopus Indexed Journal and 20 research papers in Science Citation Index (SCI) with the highest impact factor of 7.104 in the month of July, August & September.



# **RESEARCH**

#### **Patents**

Status	July	August	September
Published	5	2	1

As converting the research work into a product is a big deal, our faculty members had taken a step forward to achieve this by publishing patents on representing various societal issues like Smart speaker system for Agriculture, Smart pillow for Children Monitoring system, Smart watch for Virus detection etc.,

For More Details Check Here: https://docs.google.com/spreadsheets/d/1Nm8JZXdEXtElJU5m9mDDQ-rH-l98nNCu/edit?usp=sharing&ouid=113395228780435870828&rtpof=true&sd=true

## **Funded Projects**

<b>Applied</b>			
Name of the Funding agency	Title of the Project		
Science and Engineering Research Board	IoT-Fog Enabled Forest Fire Prediction Based on Fire Zone Using Deep Learning and Drones		
ISRO	Deep Learning Based Horticultural Plant Growing Stage Prediction and Inventory Management of Different Plants		
DST	Children Outreach Programme		
Granted			
Special International Collaborative research grants	A Technologically empowered health care delivery in the era of Covid-19		

# FACULTY MEMBERS ACHIEVEMENTS



# Dr.P.Supraja

Dr.P.Supraja aged 31 has received **Prestigious** Visvesvaraya Best Teacher Award 2021, from Hon'ble Education Minister Shri Dharmendra Pradhan, at AICTE Headquarters New Delhi on Sept 5th 2021. She was the one among 17 Teachers who got selected at the National Level and youngest among the whole crew. The selection process carried out through rigorous screening and mainly focused on parameters like Teaching Effectiveness, Academic Research, Sponsored Research, FDPs, Consultancy, Community and outreach activities etc.

### **Dr.L.Anand**

#### **ISRO - IIRS**

Now SRMIST is a nodal centre of ISRO - IIRS, Students and faculty members of our institute can apply for Internship and attend live & Interactive courses conducted by ISRO-IIRS. on successful completion of internship and course, certificate will be provided by ISRO-IIRS.



Students from our institute can register and apply for more than 1,00,000/ internships which is offered by AICTE tie up with top notch companies. On getting internship offers from reputed companies it can lead to placements.



## Dr.Kayalvizhi Jayavel

Dr.Kayalvizhi Jayavel, Associate Professor at Department of Networking and Communications, School of Computing is the IoT expert advisor for the joint collaborative research program between SRM Institute of Science and Technology and University of Rwanda and bagged with a **grant amount of INR 45,00,000** for their proposal titled "A Technologically empowered health care delivery in the era of Covid-19". The duration of the project is 01.01.2021 to 30.12.2022.

# MOU



MoU signed between SRM Institute of Science and Technology and VEI Technologies Chennai on 18th August 2021. To enhance students' Internships, introducing one credit course, Industry Collaborative Project etc.,

Faculty Co-ordinator: Dr.P.Supraja



The MoU is signed on 2nd April 2021 with Ajna Labs Private Limited for five years. It embodies the following terms: Student project, Research Activities, Internships and collaborative publications etc.

Faculty Co-ordinator: Mrs.K. Meenakshi

# **ASSOCIATION ACTIVITIES**

# Department of Networking and Communications Association (NWC) Inauguration

Inauguration of Department Association, club Activities and for other department initiatives

DATE: 08/09/2021

Speaker: Mr.Abhilash O.P, Lead Security Architect,

cisco





### **NWC Teacher's Day celebration**

Teacher's day was celebrated with faculty talks, games and various events.

DATE: 09/09/2021

**Organisers: NWC Association Team** 

### **NWC Green space Initiative**

Plantation drive -Students and Association Teams planted few saplings in our campus

DATE: 29/09/2021

**Organisers: NWC Association Team** 



# **EVENTS**

# Workshop on live proposal towards funding grants

To understand, comprehend, apply the skills acquired to create a proposal on the fly

DATE: 07/09/2021-09/09/2021,13/09/2021

Organiser: Dr.Kayalvizhi Jayavel





Self-employed

ti Thapar University

#### Anupinder Singh -3rd

C++ and Python Trainer | Machine Learning Enthusiast | Tech Speaker | Udemy Instructor

Talks about #cloudsim, #programming, #cloudcomputing, #machinelearning, and #academicresearch

Chandigath, India - Contact info

# Workshop on CloudSim and iFogSim Simulation Tool

Introduction to cloud and Fog Computing.Hands on sessions for exploring Cloud and Fog based Simulation Tools

DATE:07/09/2021-08/09/2021 Speaker:Mr.Anupinder Singh

### **FDP on Cyber Security**

To give faculties an extensive overview of cyber security issues, tools and techniques that are critical in solving problems in cyber security domains.

DATE: 01/09/2021-03/09/2021

**Organisers:** 

Dr.Mukesh Krishnan, Ms.G. Sujatha

**Mr.Joseph Raymond** 





### FDP on Networking and IPv6

Familiarize with shortcomings of Ipv4. Introduce IPv6 as a remedy of IPv4 issues And to explore the design principle of IPv6

DATE:23/08/2021-25/08/2021
Organisers:Dr.K.Venkatesh and
Dr.J. Godwin Ponsam



### Byju's Inagural Event

Satellite Seminar Expert talk on How to Crack the top-Rated Placements, Higher Studies, Internships.Bridging the backlog of skill sets required for the corporates.

DATE:23/08/2021 Organiser:Ms.Safa

# Three-day CSI Sponsored workshop on Data Science with Machine Learning using R Programming

In collaboration with Data Science & Bussiness system conducted workshopto imbibe practical knowledge in Data Science with Machine Learning using R Programming among the participants.

DATE: 18/08/2021-20/08/2021

Organisers: Dr.S.Suchitra, Dr.N.Senthamarai,

Dr.M.Jeyaselvi, Dr. A.Vijay Vasanth,





# Direction to Quality Publication and Improving Citations

To create awareness among faculties and researcher scholars about reputed journals and indexed databases to publish their research work and to build their research profile.

DATE:11/08/2021

Organiser: Dr. M. Saravanan

# **ALUMNI MESSAGE**



Swastik Banerjee

B.Tech IT - (2017 - 2021)

I remember when I was entering my first year of college, I was excited but at the same time extremely nervous. It was the first time I was going to live outside home.

Reflecting back on the whole experience now, I would encourage my juniors to recognize that like any other thing in life, you'll face both ups and downs throughout your college experience. The important thing to keep in mind, however, is to always try your best and not let the instances where you may have fallen short hold you back from continuing to work hard and reach your full potential.

SRM has ample opportunity for you to expand your thoughts, understand and redefine your perspectives, and converse with various kinds of people and grow into your better self.

Not only does it have excellent co-curricular labs and workshops, there are tons of other societies and clubs, committees and organisations as well where you will definitely find like-minded people with similarly aligned interests.

As you gear up to start on this amazing experience at SRM, or might as well already been experiencing it, always remember that the courses you take, the perspective you carry, and most of all, the friends you make, can change your world.

Over the 4 years of your journey, it gives a proper ambience for you to find out and discover what you really want from yourself after graduation, and to nurture yourself and work towards that by developing the appropriate soft-skills.

# **PLACEMENTS**



**Subhojeet Bhattacharjee** 

14 Lacs Fidelity Investments Intern (35,000 p,m)



**Eshaan Bhardwaj** 

4 Lacs Fidelity Investments Intern (35,000 p,m)



Harsh Srivastava

4 Lacs Fidelity Investments Intern (35,000 p,m)







Divij Gupta

30.5 Lacs Amazon System Develop Engineer



20 lacs Amazon Support Engineer



Out of 345 students 221 are got placed in marquee, dream and super dream offer till September month. 2 in marquee offers, 75 students in super dream offers, 77 students in dream offers and 67 in internship offers.

For More Details Check Here: https://docs.google.com/spreadsheets/d/12Wk5ou3cCs54yvtBJr9ifeNl2jfA4ttM/edit?usp=sharing&ouid=113395228780435870828&rtpof=true&sd=true

# STUDENT ACHIEVEMENTS

Sri Krishna Siddhardha Varma K (Cyber security)

Participated in various events of Crack the Code by Coding ninjas at SRMIST and won 1st prize in quiz competition and 8th rank in overall events

Soumiya Chadha, Aishani Ghosh, Ishi Saxena (Information Technology) Participated in the Hackathon event Hack the Gap and won 1st prize

Motati Ram prakash Reddy (Networking)

Sought 1st place in Bajaj HackRx 2.0 Hackathon

**Sumrit Grover** (Information Technology)

Sought 3rd place in Double Slash

Mungara Ganesh Haricharan, Soorneedi Pranai Govind, Yashodhana Shukla, Eshaan Bhardwaj and Chinmay Somani Successfully completed Gurugram Police Cyber Security Summer Internship 2021 with excellent performance rating

(Cyber security)

**Udit Dhawan** 

(Cloud computing)

Sought 11th place in IndyComps Quiz

Jahanvi Solanki

Got Best Research Paper award in ICIOT 2020

(Cloud computing)

# STUDENT ARTICLES



Johny Samuel
III Year IT- L1 Section

Beautiful memories of the past when I was invited as a speaker at the young age of 15 in the International Conference on Remote Sensing for Disaster Management in 2017, at Andhra University, India, to present my research work on Geospatial Flood mapping. In December 2018, I was the only school student invited as a speaker at the International Congress of the Operational Research Society of India, hosted by IIT Bombay. My research findings on "Geospatial Flood Risk mapping and Analysis Tool", was published as a chapter in Springer Nature Journal Series in Geomechanics and Geoengineering, in 2017 which was appreciated by Dr. David Green, Program Manager, NASA and the Vice President of Google (Jacquelline Fuller). After joining SRM, I founded two successfully running companies, namely Rezzlon and Tesseract, one of which is a B2B company focusing on mass serialisation and Anti Counterfeit. I had to manage my time equally for my academics as well, I currently have a CGPA of 9.81 and I hope to handle both my companies and college with equal priorities.



Joita Mitra III Year IT – K2 Section

#### Blockchain – A Technological Revolution

If you've never come across the terms Blockchain, Cryptocurrency or Bitcoin, you're probably living under a rock. And if you're like me, you've more than once pondered over the question of "What exactly is a Blockchain?" Simply put, a blockchain is an immutable database, also known as a distributed ledger, that is secured through the use of decentralization and cryptography.

Blockchain sought to solve the problem of the middleman — how do we eliminate the need for a third-party in transactions of all kinds? This is where decentralization comes into play. Generally speaking, centralization of power can result in companies like Facebook, Amazon, and Google finding ways to monetize user data and habits that the user may not appreciate or be hesitant to share. In contrast, decentralization allows peers to exchange values through transactions without relying on a central authority. A decentralized system offers transparency to the public in addition to being highly resistant to attacks.

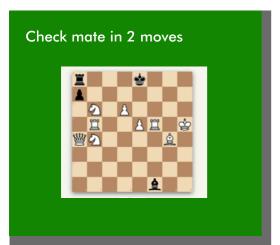
Now let's delve into how a blockchain works. Every chain consists of multiple blocks and each block stores data, like records of valid transactions. All blocks are safeguarded by cryptographic hashes, which are calculated based on the previous block's hash and current block's data. Thus, binding all the blocks in a chain. A hash is like a fingerprint for digital data. Miners create new blocks on the chain through a process called mining which performs the calculation of this hash. Hash computation is extremely resource intensive as it requires you to use a hit and trial method for every possible value to get a correct hash. Any miner that is able to calculate the correct hash first is rewarded with a new coin.

Blog: Joita Mitra — Medium

# **PUZZLE**

What does this message say?

GTYORJOTEOUIABGT



This is an unusual paragraph. I'm curious how quickly you can find out what is so unusual about it looks so plain you would think nothing was wrong with it. In fact, nothing is wrong with it. It is unusual though. Study it, and think about it, but you still may not find anything odd. But if you work at it a bit, you might find out. Try to do so without any coaching!

What does this represent: mce, mce, mce?

#### **C Aptitude Questions**

```
Find Output
a. #include<stdio.h>
int main()
{
    int i = 1, j = 1;
    for(--i && j++; i<10; i+=2)
    {
        printf("loop ");
    }
    return 0;
}
b. #include <stdio.h>
#define SQUARE(a) (a)*(a)

int main() {
        printf("%d\n", SQUARE(4));
        int x = 3;
        printf("%d\n", SQUARE(++x));
}
c. Program to add two numbers without using arithmetic operator
d. How to change the attributes of files and folders?
```

Guess the answer for the picture puzzle



# **EDITORIAL TEAM DEPICC**



ARNAV SHARMA
President



NIKHIL TELUKUNTHA
Vice-President



MANASA GULLAPALLI
Creatives Director



VAIBHAVI TANDON
Social Media Lead



**SCO Newsletter Head** 

Dr. B Amutha
Prof. School of Computing

# **FACULTY TEAM**



Dr. V.M. Gayathri



Dr. P. Supraja



Ms. A. Helen Victoria

### LOGO DESIGNED BY NWC ASSOCIATION

Newsletter name Suggested Dr. Vaishnavi Moorthy

