



# NAZARETH COLLEGE OF ARTS & SCIENCE

(Affiliated to the University of Madras)

(Re-accredited with 'B' grade by NAAC)



Kovilpadthagai Main Road, Kannadapalayam, Avadi, Chennai

## DEPARTMENT OF COMPUTER SCIENCE

YEAR 2021-2022

### About The College

Nazareth college of arts and science was established in the year 2000, by Mrs. & Mr. David. The college is affiliated to the University of Madras, it is located in the suburbs of Chennai with a sprawling campus which creates an environment to foster holistic learning and growth. The intake of students is based on their general performance criteria set by the college. The college caters students from the drivers backgrounds, often taking social initiative of imparting education to the students who have a vision but are less privileged the college provides congenial academic platform from the students. Laurels and achievements won by the college have strengthened its path all through these years.

### About The Department

The department was established in the year 2000 by C & D Educational trust; it was started with initial strength of 24 students. This Course prepares the students to work in teams to build software system and apply the technologies in various fields of Computer Science, including mobile application, website development and management, database and computer networks.

### Editor

Ms. E. MANO RANJITHAM M. Sc., M.C.A., M.Sc(Psy), M.Phil

### Associate Editor

Ms. R. Meenakshi M. Sc(ESC), M. Phil(ESC)

Ms. R. Kaviyarasi M. Sc(CS), M.C.A., M.B.A., M.Phil

Ms. S. V. Rajiga M.C.A., M.Phil

Mrs. S. Abhirami, M.C.A., M. Phil., S.E.T.

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### Student Editor

Mr. V. RAHUL 1nd B. Sc(C.S.)





## SECRETARY'S MESSAGE



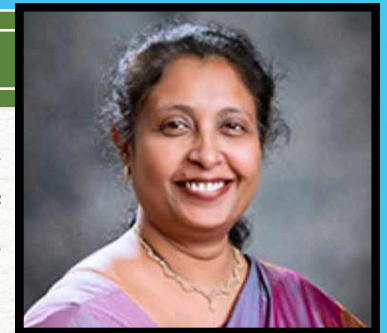
**"Education is the passport to future, for tomorrow belongs to those who prepare for it today"**

*-Malcolm X.*

I am delighted to know that the Department Of Computer Science is set to release in fourth issue of News Letter. The Insurance of this news letter is the assurance of our ideal education service that likely to be extended in future.

I offer my appreciation to the members of the faculty and students involved in bringing out the edition victoriously.

## PRINCIPALS MESSAGE



Dear students and faculty it is a great happiness, I share my thought and wishes for the news letter of the Department of Computer Science. The release of the "Array Express" another milestone in the department towards innovation and knowledge sharing.

### The Age of the big data

Data science has taken over the corporate world in the last few years. In today's digital world, lot of information is stored in big data. Those data provide the opportunities to solve the big problem of the society. Information is the oil of the 21st century and analytics in the combusine engine said by Peter Sondergaard, senior vice president, Gartner. So if one is good in numbers and fascinated by data be ready for opportunities that knock that door embrace the new age of big data. I congratulate the department for this initiative and believe that teaching learning combine with practical experience will equip the students to handle challenges in all walks of life and help them to embrace the age of big data.

## VICE PRINCIPAL'S & HOD MESSAGE

Dear Reader's

Greetings to you and warm wishes!

"The mind is not a vessel to be filled, but a fire to be kindled." Said Plutarch.

I congratulate the staff and students of all faculties who used various mediums of expression to present their ideas. As long as our ideas are expressed and thoughts kindled we can be sure of learning, as everything begins with an idea.

Array Express, our Department magazine, is a platform for our students to showcase their creative abilities hidden dreams and aspirations for writing. Our magazine aims towards bringing out the talents in our students through articles, poems, quizzes and experiences. We at Array Express Encourage our students to put on their thinking caps and create.



**"INSIDE ALL OF US IS A HIDDEN DREAM"**



# STAFF ARTICLE

## MANY HANDS MAKE LIGHT WORK.

### Ms.R. Meenakshi

M. Sc(ESC)., M. Phil(ESC)  
Assistant Professor

**Many hands make light work is true in many facets of our lives. I is always easier to finish a job when several people pitch in to get it one.**

It is the concept of teamwork. Most companies boast of how teamwork is the backbone of the company. That is because they have figured out that when you have “many hands” in the job it makes for a much lighter workload for everyone. You can see this come to light when you try to lift something heavy. If you try to lift it on your own, it isn’t just hard to do, it can cause you a great deal of injury. If you get more people involved in the process, the item becomes far less heavy to the one person who tried to lift it before. The more people involved in lifting the heavy object, the lighter it becomes until it could hardly be called hard work at all. You can do work by yourself. You may even make some progress. That doesn’t mean that it wouldn’t be easier if you had more people involved in it. There are those people that think working alone is much better. They feel that others get in the way and hold them up from anything being accomplished. That is only true if one of the team members is being lazy. If everyone works together, great things can get done in an amazingly short amount of time.



### Ms.S. Abhirami

M.C.A., M.Phil., S.E.T.  
Assistant Professor

#### SPORTS MANAGEMENT:

Sports management is the business of sports and recreation. Sports managers find numerous opportunities of working in professional teams, colleges, recreational departments and marketing firms.

#### SKILLS REQUIRED FOR SPORTS MANAGEMENT:

- |                            |                          |
|----------------------------|--------------------------|
| ☒ Physical Fitness         | ☒ Determination          |
| ☒ High Energy              | ☒ Enthusiasm             |
| ☒ Passion for Sports       | ☒ Management Skills      |
| ☒ Stamina                  | ☒ Presentation Skills    |
| ☒ Resilient and Optimistic | ☒ Collaborative Attitude |
| ☒ Keen Observation Skills  | ☒ Time management skills |
| ☒ Patience                 | ☒ Sporting spirit        |

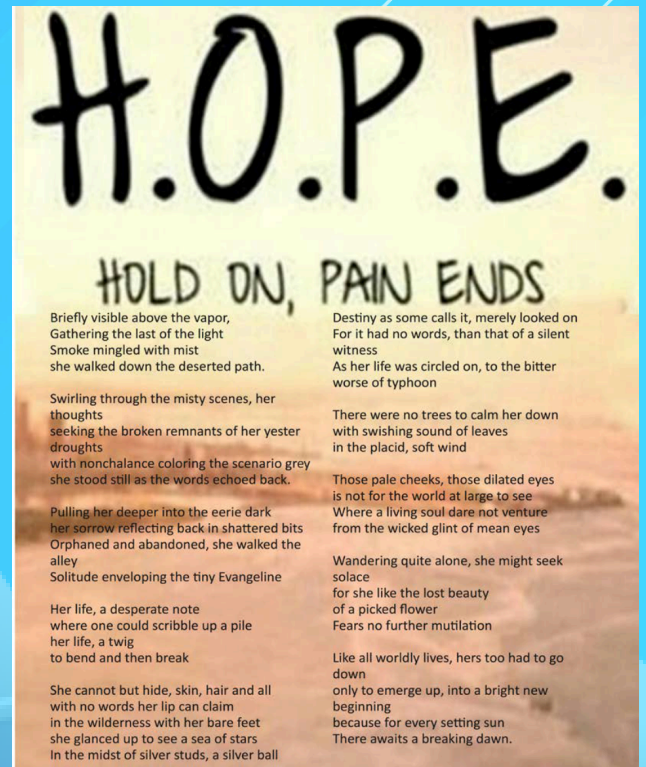




# STAFF ARTICLE



**Ms.R. V. Rajiga,**  
M.C.A.,M.Phil.,  
*Assistant Professor*



Briefly visible above the vapor,  
Gathering the last of the light  
Smoke mingled with mist  
she walked down the deserted path.

Swirling through the misty scenes, her  
thoughts  
seeking the broken remnants of her yester  
droughts  
with nonchalance coloring the scenario grey  
she stood still as the words echoed back.

Pulling her deeper into the eerie dark  
her sorrow reflecting back in shattered bits  
Orphaned and abandoned, she walked the  
alley  
Solitude enveloping the tiny Evangeline

Her life, a desperate note  
where one could scribble up a pile  
her life, a twig  
to bend and then break

She cannot but hide, skin, hair and all  
with no words her lip can claim  
in the wilderness with her bare feet  
she glanced up to see a sea of stars  
In the midst of silver studs, a silver ball

Destiny as some calls it, merely looked on  
For it had no words, than that of a silent  
witness  
As her life was circled on, to the bitter  
worse of typhoon

There were no trees to calm her down  
with swishing sound of leaves  
in the placid, soft wind

Those pale cheeks, those dilated eyes  
is not for the world at large to see  
Where a living soul dare not venture  
from the wicked glint of mean eyes

Wandering quite alone, she might seek  
solace  
for she like the lost beauty  
of a picked flower  
Fears no further mutilation

Like all worldly lives, hers too had to go  
down  
only to emerge up, into a bright new  
beginning  
because for every setting sun  
There awaits a breaking dawn.

## Computer is an electronic machine

It is our today's generation vision.  
It is the boon to the society.  
It role is like almighty.  
Java is a powerful language.  
It has the ability to collect the garbage.  
C language consists of pointer.  
Computer role is greater.  
Cloud is a computer technology.  
It is used to handle human psychology  
Human can make an error.  
Computer reflects it like a mirror.  
Storage measured in bytes.  
It makes today's world bright.  
Man is made up of blood.  
It makes our mind broad.  
AI is a computer application  
It gives human's life a new definition.  
Computer is today's hero  
Without it our world become zero.



**Ms.R. Kaviyarasi**

M. Sc(CS.), MCA., MBA., M. Phil

*Assistant Professor*



# LOGIN LAURUS ASSOCIATION

## ABOUT THE ASSOCIATION

LOGIN LAURUS “conserving victory” Association of the Department of Computer Science is a platform for computer pursuing students to enhance the interpersonal and leadership skills among the students. The Association also helps the students to keep in track of current trends in IT field by organizing and participating in various IT related events.



## LOGIN LAURUS ASSOCIATION MEMBERS

MS. R. MANO RANJITHAM (VICE-PRINCIPAL & HOD)

MS. R. KAVIYARASI     Assistant Professor

MS. R. MEENAKSHI     Assistant Professor

MS. S. V.RAJIGA     Assistant Professor

MS. S. ABHIRAMI     Assistant Professor



# ODD SEMESTER

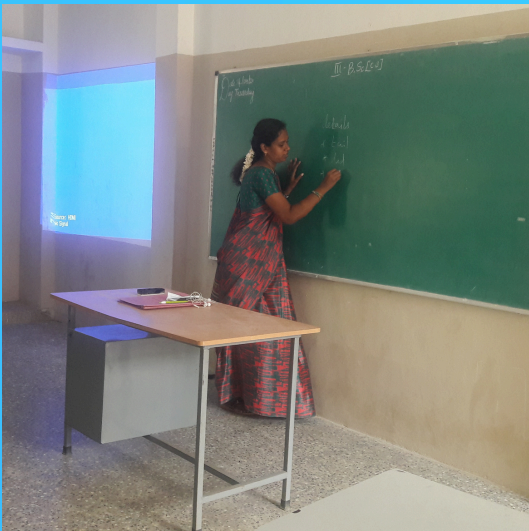
## ORIENTATION PROGRAM

The Department of Computer Science organized “Orientation Program” for the students was jointly organised by College and IQAC during the odd semester in the academic year 2022- 2023. It was conducted for one week from 18th July to 22nd July through Virtual Meet. Each day a specific topic orientation was given by the respective staff members.



## SUBJECT ORIENTATION REPORT

The Department of Computer Science organized “Subject Orientation Program” for the students during the odd semester in the academic year 2022- 2023. Subject Handlers of the respective subjects given orientation to the students. In this session staff members given syllabus for their subjects. They also explained about the scope of the subjects along with its various outcome.





## CYBER SECURITY AWARENESS PROGRAM

The Department of Computer Science organized a Awareness Program on “Cyber Security” in association with IQAC, on August 29, 2022 as an outcome of International Webinar conducted in the name of Cyber Week Celebrations. The Department of Computer Science planned to start the awareness program among school students and take it to the public. One session arranged for Government School, Arikempet. The class of IV and V took part in it . Session started with prayer. Ms.S.V.Rajiga, Assistant Professor, Department of Computer Science, Nazareth College of Arts and Science introduced the session. Ms. Josephine Musika and Mr. Gibson Sharon of III B.Sc CS created awareness among students of cyber security. They also elaborated on Cyber Security and the technological sophistication to protect the data from the crimes. In the Query Session students doubts were clarified .Mrs. Nandhini and Mr. Parveen of III B.Sc. CS created an awareness of E-waste Management among students. They explained about E- waste Management and proper disposal of e-waste items. Students were active and interacted well. In the query students doubts were dispelled. The feedback of students about the session was very good. This programme enlightened the students on the Cyber crimes.

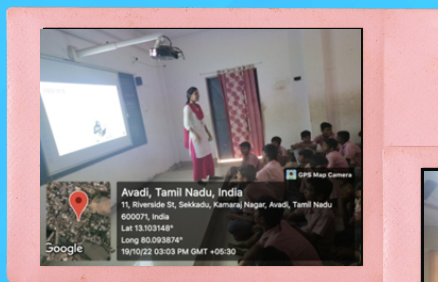




## AWARENESS PROGRAM FOR GIRL STUDENTS FEMININE HYGIENE

We organized a Awareness Program on “Feminine Hygiene” in association with IQAC for female students, on August 11, 2022. Ms.E.Mano Ranjitham, Vice Principal and Head, Department of Computer Science was the speaker of the day.

She started her speech with quotes related feeling proud to be a female. She listed the hygienic practices she follows every day. Since toilets are maintained through manual cleaning. She insisted on using the toilets with maximum cleanliness. She remarked that women are inhibited by shyness to talk about these essential practices. She also encouraged them to feel free to talk about these practices. She insisted that women always should be strong mentally and physically. They should always feel free to speak and hear about good things related to them especially. She dilated on the symptoms that appear at the time of menstruation. Finally she supplied some health advisory to dispose the menstrual pads in a hygienic way . A total of 41 Students got benefited from this session.



## E-WASTE MANAGEMENT AWARENESS PROGRAM AWARENESS PROGRAM

The Department of Computer Science organized an Awareness Program on “E-Waste Management” in association with IQAC, on August 29, 2022 as an outcome of E-Waste Management Project. The Department of Computer Science planned to start the awareness program among school students and take it to the public. One session arranged for Government School, Arikempet. The IV and V standard students take part in it. Session started with prayer. Ms.S.V.Rajiga, Assistant Professor, Department of Computer Science, Nazareth College of Arts and Science accompanied the students and given introduced to the Session. Mr.Parveen D and Ms.Nandhini V of II B.Sc CS given awareness among students on E-Waste Management. They explained about e-waste management and proper disposal of e-waste items. Students were very active and interacted well. In the Query Session students doubts were clarified. The feedback of students about the session was very good. This programme enlightened students about E-waste management and proper way disposing E-waste.

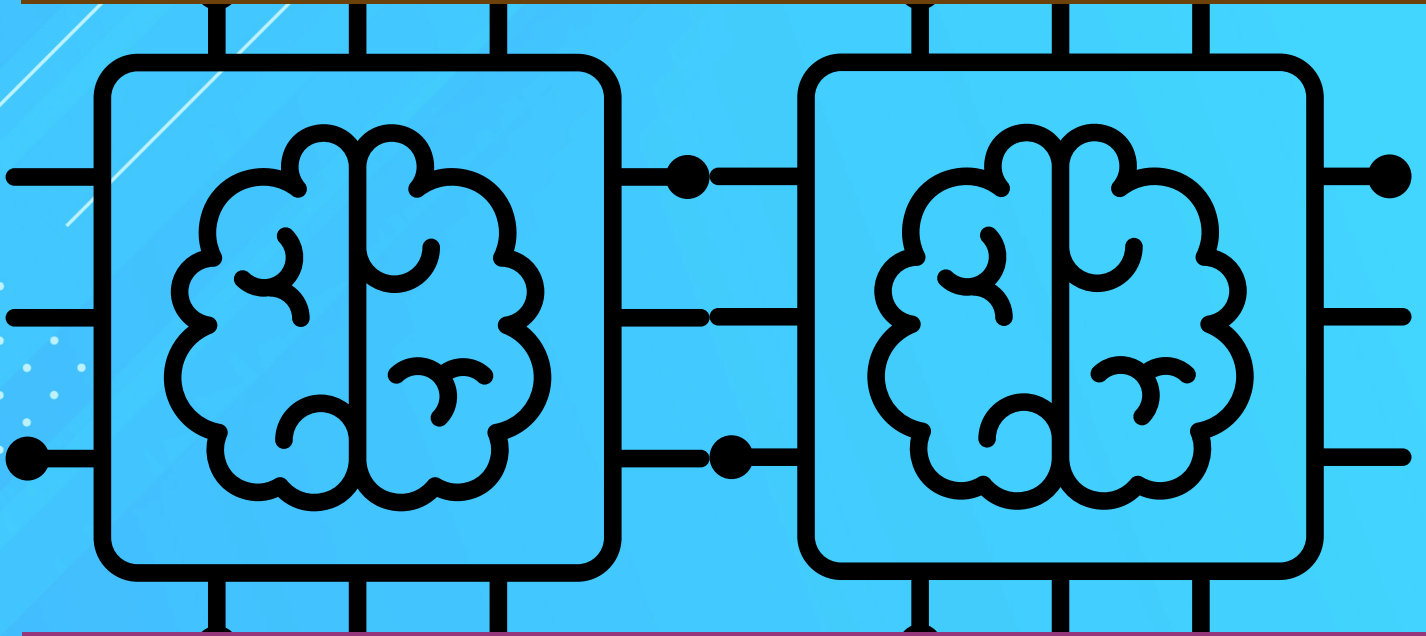


## UPSKILL LEARNING MICROSOFT OFFICE

A Report on Three-Day Workshop on “UpSkill Learning Microsoft Office” organized by Computer With an objective to acquaint the staff with knowledge of using Microsoft Office and understanding Internet facility, topics were chosen which were not mastering the entire Office suite but those tools that were needed by the staff in preparing their academic records.

The program was inaugurated by Mrs. E. Mano Ranjithm, Asst. Prof., Head-in-charge, Department of Computer Science highlighting the importance of upskilling Office for the staff.

The resource persons were the faculty members of the Department of Computer Science, Mrs. S. Abirami, Asst. Prof. explained how to use Excel, Word and Powerpoint for academic work. They were also taught the usage and advantage of Google Sheets, Google docs. The advantage of sharing the documents online was demonstrated.



## TECH WEEK – INTRA DEPARTMENT EVENT

The Department of Computer Science organized an Intra Department Program “Tech Week II” in association with Internal Quality Assurance Cell from 29.09.2022 to 30.09.2022. A total of seven events were conducted in various names. Poster making event was conducted on Monday in the name of Marvelous Monday. Debugging event was conducted on Tuesday in the name of Techy Tuesday. Web Site Development event was conducted on Wednesday in the name of Wiki Wednesday. Debate and Tech News events was conducted on Thursday in the name of Tele Thursday. Technical Poetry and Tech Walk events were conducted on Friday in the name of Fantastic Friday. New ideas were presented in these topics. Rules for all the program was framed separately and circulated among the students for their preparation.





## INTERNATIONAL PEACE DAY

The Department of Computer Science celebrated International Peace Day in association with IQAC as a part of SDG activity, on September 21, 2022. Peace is a stress-free state of security and calmness that comes when there's war in Nations. The value of peace is in the form of caring, respecting others and tolerating. To remember this day and also to create awareness of it this day is celebrated world-wide.

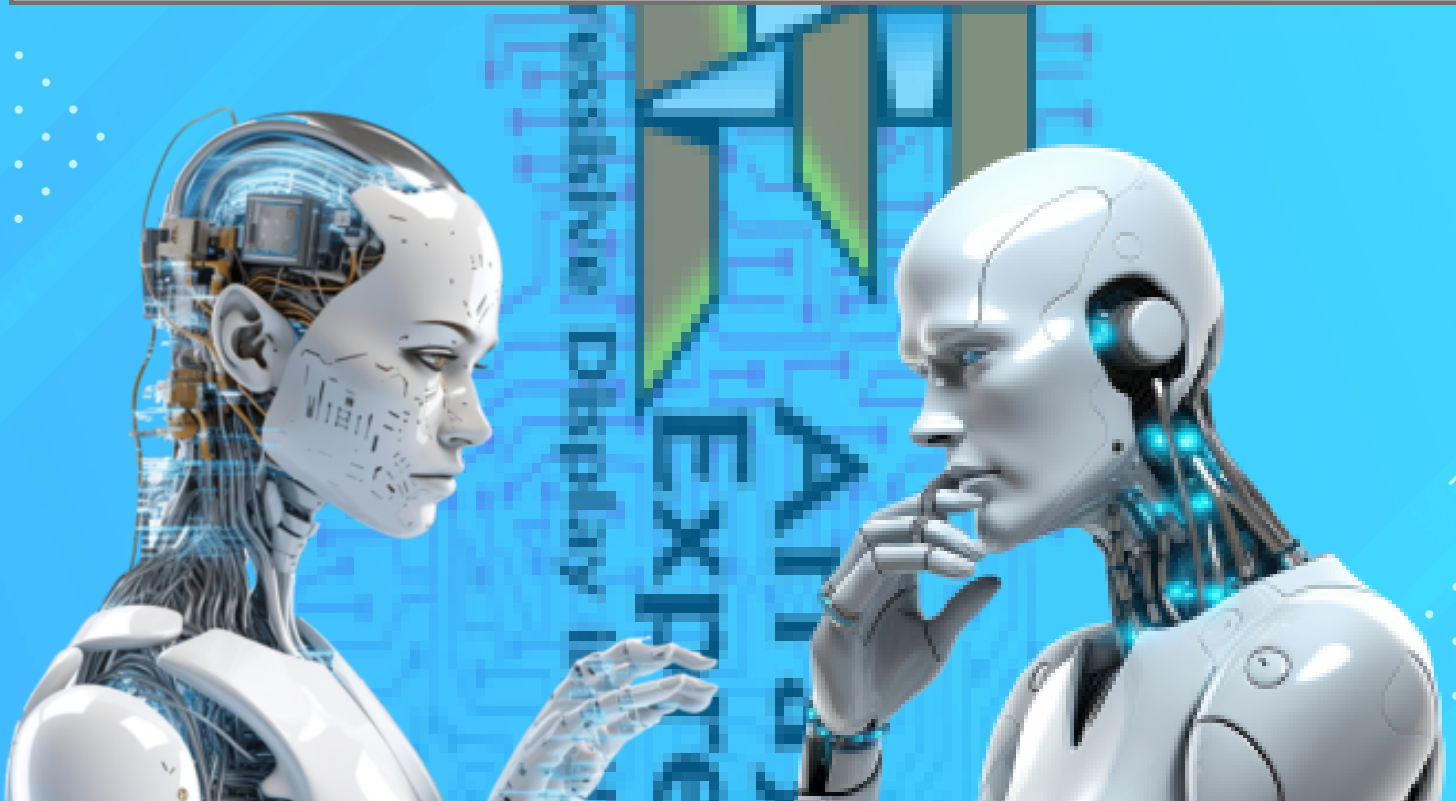
On this day around 9.30 am students those who came in white dress were gathered in the assembly ground. Program started with a warm welcome by Ms.A.Rajalakshmi, of III B.Sc CS . Dr.E.Mary Angeline , Principal, Nazareth College of Arts and Science felicitated the gathering. She greeted the students and insisted them to be a peaceful person in the society. She also supplied some tips and ideas to maintain peaceful life . Ms.E.Mano Ranjitham , Vice Principal and Head, Department of Computer Science , Nazareth College of Arts and Science presided the program with Oath taking ceremony. The staff members and the students in the ground took Oath. Mr.Stephen Raj , Alumni of our College and Founder of Omega Exotic Pet Farm was the guest of the day. The guest, Secretary, Principal, and Vice Principal along with staff members inaugurated this function in Nazareth Campus by flying doves as a symbol of peace. A documentary film about Anti-apartheid activist Nelson Mandela and Mother Theresa was screened to the students to understand and maintain the peace in their life. Students really understood the purpose and reason of celebrating these kind of special days through this celebration.





## LA CORSA 2022- DEPARTMENT ASSOCIATION PROGRAM

The Department of Computer Science organized its association function La Corsa'22 in association with IQAC on 21.10.2022 as their Department Association Program. In the Inauguration session Ms.V.Deepika of III B.Sc CS welcomed the gathering. Ms.E.Mano Ranjitham, Vice Principal and Head, Department of Computer Science felicitated the gathering. On stage and Off stage events were conducted for the students. Power Point Presentation and Ad\_Zap and were conducted as on stage events . Debugging, Art Out of Waste, Web Designing and Algorithm To Flow Chart were conducted as off stage events. Mr.Anderson, Assistant Professor, Department of English , Ms.Beula, Assistant Professor , Department of Mathematics , Ms.Uma, Assistant Professor , Department of Mathematics , Ms.Gomathi, Assistant Professor , Department of Computer Application, Ms.Anjali Assistant Professor, Department of Business Administration, Ms.Divya , Assistant Professor, Department of Commerce , Mr.Bhagat, Assistant Professor, Department of Visual Communication and Mr.Michael Raj, Lab Administrator, Department of Computer Science acted as judges of the events. In the valedictory session Mr.J. Kevin Mathews of III B.Sc CS welcomed the gathering. The gathering was felicitated by Dr.E.Mary Angeline , Principal, Nazareth College of Arts and Science. Ms.R.Meenakshi, Assistant Professor, Department of Computer Science introduced the Resource Person of the day. Mr.Arulananda Selvakumar, Head , Vice President of Technology – Jio Payments, Chennai was the special invitee of that day. He spoken about students bringing out their talents with the help of families, teachers and surroundings. He insisted not to waste even a single minute and to grab all the opportunities for success. The session was very informative and interesting. The winners and runners were given prizes and certificates. Feed Back of the session was received from the students. A total of 270 participants attended this session. Finally Mr.P.Maheshwar of III B.Sc (CS) proposed a vote of thanks.





# EVEN SEMESTER

## INTRA DEPARTMENT QUIZ REPORT

The Department of Computer Science in association with Internal Quality Assurance Cell organized an “Intra Department Quiz on 27th January 2023. Students from our department were participated in the event. The quiz questions were based on General Knowledge, Aptitude, and Current Trends in IT. The total number of students participated in this Quiz were 21. Certificates will be provided to the students those who scored above 60%. It was an informative event and each student participated actively and acquired knowledge. For the final year students this will be a bridge to their carrier to clear their aptitude level in all the placements and for the first & second years this competition created an awareness on current trends in technology.



## E-SHARING : PROJECT MANAGEMENT

The Department of Computer Science conducted an e-Sharing programme on Project Management on 30.01.2023. Mrs. S. Abirami, Asst. Professor, Department of Computer Science and Coordinator made an introduction speech about the programme and introduced the Resource Person Mrs. Sreedevi Arava, Project Manager, UST-Global, Chennai to the final year students and briefly explained her roles in her 17 years of IT industry career.





## IIC WEBINAR - WEBINAR ON “SESSION ON ACCELERATORS/INCUBATION-OPPORTUNITIES FOR STUDENTS & FACULTIES-EARLY STAGE ENTREPRENEURS”

The Department of Computer Science, in collaboration with Institution Innovation Council and Entrepreneurship and Development, organised a webinar on “Session on accelerators/incubation-opportunities for students & faculties-Early stage entrepreneurs” in association with IQAC, on April 28, 2022. Dr. S. Seshadri, Advisor of Technology Business Incubator, Sathyabama University, Sholinganallur, Chennai was the special invitee of the day. The programme started with a prayer song followed by the Welcome Address. Ms.Magila, Student, II B.Sc (CS) welcomed the gathering. Key Note Address was given by Dr. E. Mary Angeline, Principal, Nazareth College of Arts and Science. Resource Person was introduced by Ms. Agnes Merlin, Student, II B.Sc (CS).

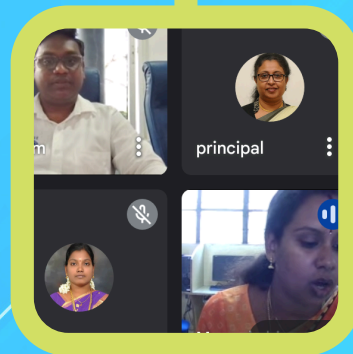
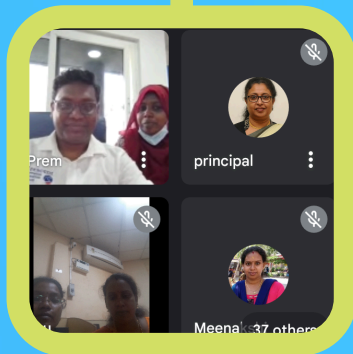
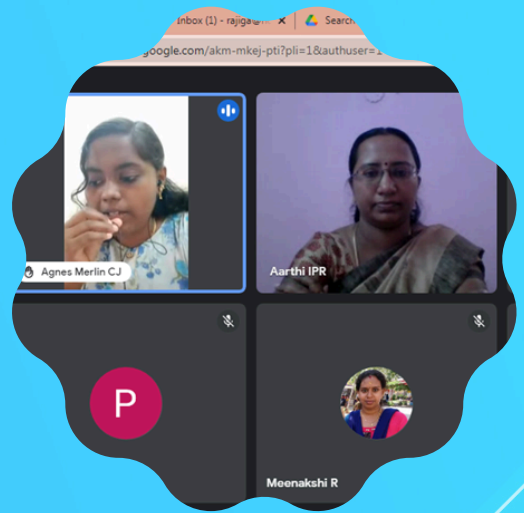
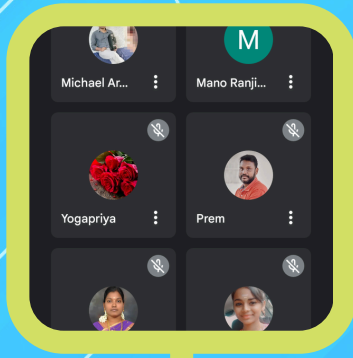


## DEPARTMENT ASSOCIATION PROGRAM

The Department of Computer Science in association with IQAC organized its La Corsa'22 on 05.05.2022 as their Department Association Program. In the Inauguration session Mr.B.Logesh Kumar of III B.Sc CS welcomed the gathering and felicitation was given by Ms.E.Mano Ranjitham, Vice Principal and Head, Department of Computer Science . There are three on stage events and two off stage conducted for the students. The three onstage events conducted are Power Point Presentation, Ad\_Zap and Word Act and the three off stage events conducted are Quiz and Puzzle. Ms.Rexy , Head, Department of Business Administration and Dr.Saravanan, Assistant Professor, Department of English judged PPT Event. Ms.Gnana Selvi, Assistant Professor , Department of Computer Application and Mr.Arun Theoder , Assistant Professor, Department of English judged Word Act Event. Winners and Runners selected for

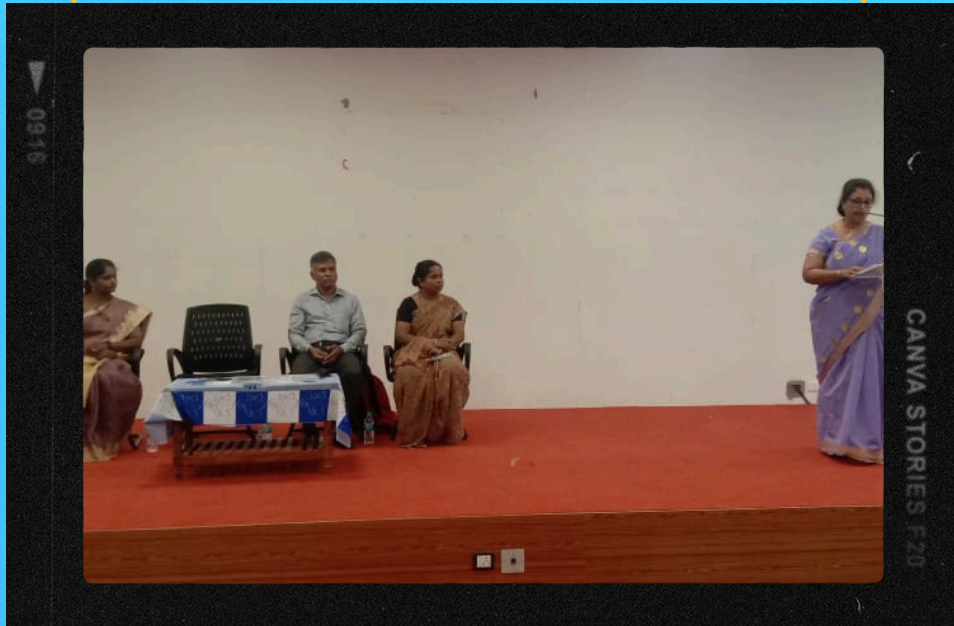
each event. In the valedictory session Ms.K.Magila of III B.Sc CS welcomed the gathering and felicitation was given by Dr.E.Mary Angeline , Principal, Nazareth College of Arts and Science . Mr.M.Thirunavukarasu of III B.Sc CS introduced the Resource Person of the day. Mr.Sathish Kumar Kannan, Founder of Why Global Technologies , CEO and Director of Abhis Overseas, EDU Campus Private Ltd, Chennai was the special invitee of that day. He spoken about Virtual Reality and Augmentation Reality. Guest Speak was very informative and interesting. The winners and runners were given certificates and prizes. “Array Express”, the Department Magazine released by Ms.E.Mano Ranjithm , Vice Principal and Head , Department of Computer Science and received by the honorable guest of the day and Ms.K.Alamelu , IQAC Coordinator and Head , Department of Mathematics. Feed Back of the session was received from the students. A total of 150 participants attended this session. Finally Mr.Deeraj of III B.Sc (CS) proposed a vote of thanks.

# PHOTOS



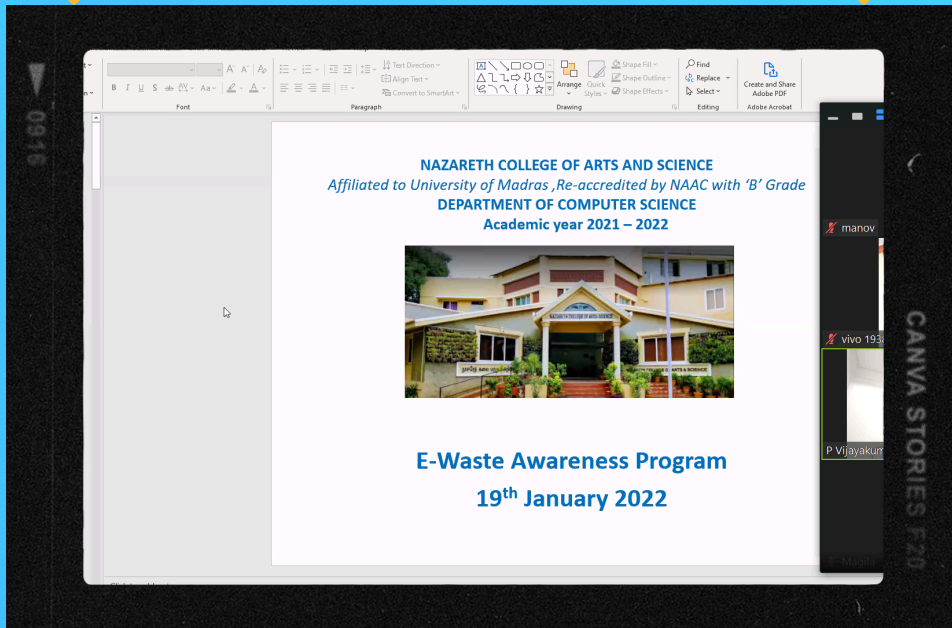


# PHOTOS





# PHOTOS



# FROM EDITOR'S DESK

Mid-way through editing and designing a pile of articles which I was nose deep in and with the thoughts of the zillion things that 'JUST HAD TO BE DONE'; I pulled at my hair for the very first time. This was the first of many such moments (hours)! Putting a magazine together was no cake walk. I along with my editorial team members have spent sleepless nights to make this magazine stand out. So here you have "ARRAY EXPRESS ,VOLUME - 4", the long awaited magazine of RSET for the year 2021-2022. The name of the magazine, "ARRAY EXPRESS" may seem difficult, but it just means "FAST TRANSMISSION OF GROUP OF DATA", Array

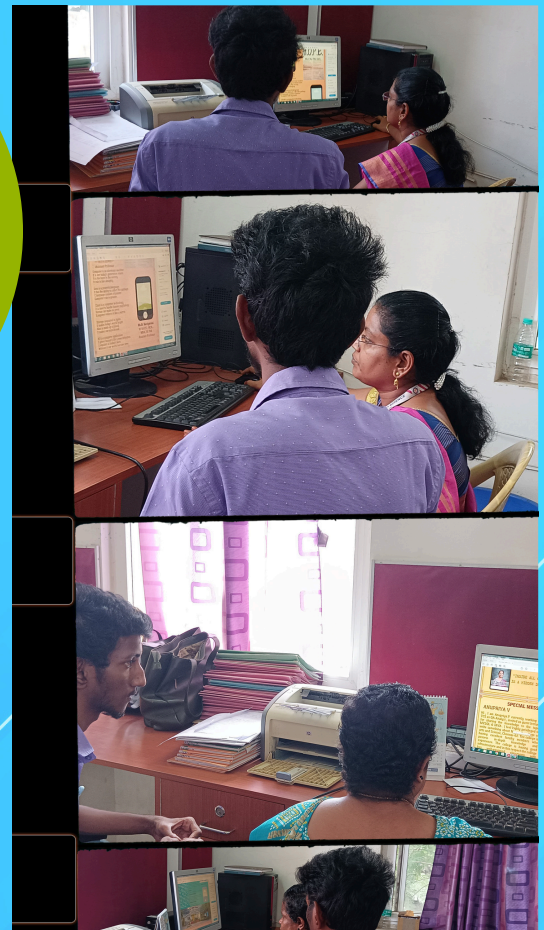
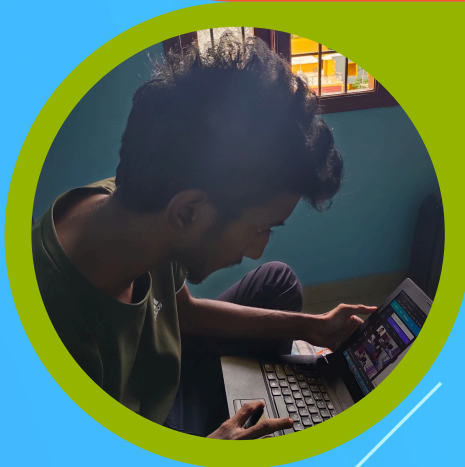
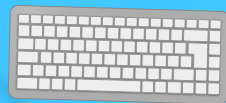
Express is one of the major public repositories for functional genomics datasets. This magazine gives an insight into the ambassadress way of life, their creativity and activities. This magazine is a platform that exhibits the literary skills and innovative ideas of teachers and students. "ARRAY EXPRESS" presents the hard work and dedication of students and contributions of teachers. I would like to thank all my editorial team members for helping me pull this through. I express my considerable appreciation to all the authors of the articles in this magazine. These contributions have required a generous amount of time and effort. It is this

willingness to share knowledge, concerns and special insights with fellow beings that has made this magazine possible.

Ms. S. V. RAJIGA

*Assistant Professor*

**Department of Computer Science**





## EDITOR'S PAGE

Most of the good programmer do programming not because they expect to get paid or to get adulation by the public, but because it is fun to program.

**RAHUL V**  
I ST B.SC.C.S.

I got a lot of experience form designing this newslet.

I created this newslet with the help of my friends and staff members.

I designed this newslet using canva.

This is the outcome of long term effort of all the people who supported me and helped me to complete this newslet.



```
WHILE (DOUBT)
{
EXERCISE
IF (TIRED) BREAK;
SWEAT OUT;
}
```



# **BEST PRACTICES**

VIRTUAL LEARNING  
CLASSROOM SEMINARS  
E SHARING  
UG INTERNSHIP TRAINING  
PEER UPDATION  
STEP, OBSERVE UPDATE(SOU)  
MOU WITH VARIOUS ORGANISATION  
ALUMNI MEET  
GUEST LECTURES  
HIGH ACHIEVERS PROGRAM  
SLOW LEARNERS PROGRAM  
INNOVATION CLUB ACTIVITIES



**SURVIVE FOR PROGRESS  
NOT FOR PERFECTION**





NAZARETH COLLEGE OF ARTS & SCIENCE

NAZARETH COLLEGE

THE F  
BE