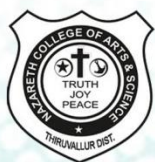


NAZARETH COLLEGE OF ARTS & SCIENCE



(Affiliated to the University of Madras)
(Re-accredited with 'B' Grade by NAAC)

Kovilpathagai Main Road, Kannadapalayam, Avadi, Chennai - 62.



DEPARTMENT OF COMPUTER SCIENCE

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 to students from diverse 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 for 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 applications, Web site development and management, databases and computer networks.



EDITORS

Ms. E.MANO RANJITHAM M.Sc., MCA., M.Sc(Psy)., M.Phil
Ms. R. KAVIYARASI M.Sc. (CS)., M.Phil., M.C.A., MBA

ASSOCIATE EDITORS

Mr. M. THYAGARAJ., MCA., M.Phil
Ms. R. MEENAKSHI, M.Phil., M.E
Ms. S. Nandhini., M.Sc., MPhil

STUDENT EDITORS

Mr. PalaniVel. A III B.Sc(CS)
Ms. Kausalya. S III B.Sc(CS)

MESSAGES

SECRETARY'S Message (**Mr.A.N.Henry Maris**)



"THE SECRET OF GETTING AHEAD IS GETTING STARTED." - MARK TWAIN

I am gratified to learn that the Department of Computer Science is set to release its Newsletter. I am bound to appreciate its maiden attempt in raising its bars of standard by channeling the interest of academics and aspirants towards formulating innovative enterprises.

This Newsletter has honoured the articles of learners and members of educational fraternity alike. The issuance of this newsletter is the assurance of our ideal educational service that is likely to be extended in future.

I sincerely appreciate those who were involved directly and indirectly in bringing out this edition victoriously.

PRINCIPAL'S Message (**Dr.E.Mary Angeline**)



Dear Students and Faculty it is a great happiness, I share my thoughts and wishes for the News Letter of the Department of Computer Science. The release of the "ArrayExpress" another milestone in the growth of the department towards innovation and knowledge sharing.

Today information technology plays a key role in students' education. Educating students in computer science is beneficial with the rising digital age. The need for logical thinking and problem solving among the students in the need of the hour.

Webex Krebs CEO of Acculation says "Societies will die if they don't continue to innovate". The computer skills are in demand across every industry in today's technology driven society. I congratulate the department for this initiative and believe that teaching learning combined with practical experience will equip the students to handle challenges in all walks of life.

EDITOR'S Message (**Mrs.E.Mano Ranjitham** - The Vice Principal)



Dear Reader,
Greetings to you!

It gives me an immense pleasure to launch the maiden Newsletter of our department. This Newsletter unfolds the unique activities, best practices and achievements of our staff and students.

I am hopeful that the newsletter is sure to be constructive and innovative as it brings out the cherished memories of the past, the practicalities of the present and the vitality of the future enterprises.

With a purpose to transpire our achievements and efforts we are coming forth with an annual newsletter aiming to communicate and look forward to feedback to improve and grow.

I am thankful to Mr. Henry Maris, the Secretary, for his constant support and encouragement in all our endeavours. I am very thankful to Dr. Mary Angeline, the Principal, who is an inspiring leader guiding and instructing us. Also, I extend my sincere thanks to the staff members and students of my department for helping to bring out the first issue of this newsletter.

We would like to dedicate the First issue to all our readers!

MESSAGES

Yamini D Manavalan (IBM - Project Manager - Cloud Services - Bangalore)

Been in IT services for 17 years, I have seen through a major evolution in technologies. It is very essential one should always upskill yourself with the latest technology in market to adapt to the change.

An expert is not one who knows everything. An expert is someone who knows one thing better than anyone else. We have more technologies that machines can compute but only few experts in each of them. You can be an expert in python or an expert in big-data. The choice is yours. What's important is what you do with it. Innovation is the key. Forget thinking out of the box. That's 70's kids. If you are thinking "who put the box? why do we need a box?" then you are already making a difference.



Garnet J Moses (CEO - Mosaic Ambrosia - U.S.A)

The roots of AI or Artificial Intelligence go deep into history. Man has always had an innate need to 'create'; perhaps a desire to be like God? The ancient Greeks had myths about robots. The word 'robot' itself was coined by Czech writer Karel Capek in his hit play in 1920 when he was looking for a word to call the artificial creatures in his play. Modern day AI had its start in 1950, when computer pioneer Alan Turing introduced the Turing test. However, AI wasn't formally founded until 1956 at a conference in Dartmouth College, New Hampshire, USA – where the term 'Artificial Intelligence' was coined. Today, AI refers to computer systems built to mimic human intelligence and perform tasks such as recognition of images, speech or patterns, and decision making. AI can do these tasks faster and more accurately than humans.

As of 2013, AI had the same intelligence as that of a 4-year-old. In 2014, a supercomputer cracked a complex mathematical problem called Erdos. The amazing thing is that humans can't even double-check the solution because the equation is too long. The file is 13 GB and just for comparison all of Wikipedia is 10GB. According to renowned futurist Ray Kurzweil, by 2020, AI will be at about the level of an intelligent adult human. Experts say automation will eliminate 73 million jobs by 2030. However, it is also creating jobs ; AI pundits predict that jobs in AI will number 23 million by 2020. Jobs will be created in development, programming, testing, support, and maintenance, to name a few. Artificial Intelligence architect is one such and some say it will soon rival data scientist in need for skilled professionals.

Five out of six Americans use AI services in one form or another every day including home personal assistants, smart home devices and drones. There is no doubt that AI is helping us live better lives right now. AI will make roads safer with self-driving cars, help in medicine and surgery, assess risk in business, aide the disabled and work customer service. However, they also pose a threat and top minds like Stephen Hawking, Elon Musk and Bill Gates believe that AI is a very real and dangerous threat to humankind. So dangerous that Max Tegmark, physicist at MIT (Massachusetts Institute of Technology) compared it to nuclear weapons. In fact, there has been a push to slow down the advancement of AI and contain it. If we don't, humans run the risk of losing control forever. Only time will tell.

Have you seen movies like The Terminator or The Matrix? They don't seem too far-fetched any more, do they? Is AI the beginning of the end of the human race? Or is it here to make our lives better? I'll let you be the judge of that. "We're far worse than we ever imagined, and far more loved than we could ever dream" - Tim Keller



Roles for Artificial Intelligence in Education – Mr.Palanivel A

Here are just a few of the ways those tools, and those that will follow them, will shape and define the educational experience of the future.

1. Artificial intelligence can automate basic activities in education, like grading.

In college, grading homework and tests for large lecture courses can be tedious work. Even in lower grades, teachers often find that grading takes up a significant amount of time, time that could be used to interact with students, prepare for class, or work on professional development. It's now possible for teachers to automate grading for nearly all kinds of multiple choices and fill-in-the-blank testing and automated grading of student writing may not be far behind.

2. Students could get additional support from AI tutors.

While there are obviously things that human tutors can offer that machines can't, at least not yet, the future could see more students being tutored by tutors that only exist in zeros and ones. Some tutoring programs based on artificial intelligence already exist and can help students through basic mathematics, writing, and other subjects. These programs can teach students fundamentals, but so far aren't ideal for helping students learn high-order thinking and creativity, something that real-world teachers are still required to facilitate.

3. Data powered by AI can change how schools find, teach, and support students.

Smart data gathering, powered by intelligent computer systems, is already making changes to how colleges interact with prospective and current students. From recruiting to helping students choose the best courses, intelligent computer systems are helping make every part of the college experience more closely tailored to student needs and goals.



Cloud Computing – Recent and Future Trends – Ms.Kousalya S

The trends in Cloud Computing has immensely transformed the Information Technology market and the digital value chain in 2016. India is impacted by this trend in the most progressive way, with cloud rapidly altering the IT landscape and companies allocating huge shares of their revenues for upcoming cloud innovations. Top industry leaders state that enterprises unwilling to migrate to cloud are at great risk of losing opportunities that speed up processes and improve business outcomes.

Rise of Cloud Applications

2016 has seen a gamut of cloud applications and more applications will rise in 2017. Companies, small, medium, and big have already invested a great deal of their IT spend on cloud applications and these numbers are expected to grow exponentially in the following year. IT developers in most organizations are streamlined to focus on cloud based services. According to a study by Forrester Research, almost 79 percent of Indian companies (who responded to the study) have a cloud related initiative in place within the organization and are planning to implement cloud as a service in the coming year.

Demand for Hybrid Cloud

Hybrid cloud is a Cloud Computing environment that uses a mix of private cloud and third party, public cloud services with the right composition between the two platforms. By allowing data to travel between the private and public clouds, hybrid cloud offers great flexibility and better data deployment options. The hybrid strategy also proves of help when it comes to demanding projects and brining in solutions to various requirements of every functional application.



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. 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.

Slide Deck & IT Trivia



The Login Laurus Association of the Department of Computer Science organized “Slide Deck & IT Trivia”. It was conducted on 27th July, 2018.

There were two events: PPT & Quiz which was conducted in our College Auditorium. Our Department Alumni, **Mrs. R. Lavanya**, Assistant Professor, S.I.V.E.T College was the chief guest of the day.

State Level Exhibition (La Corsa'18)



On 28th August 2018, we have organized a State Level Exhibition. The students from nearby schools were invited and they showcased their

talents by exhibiting working models that are made out of wastage from various computer hardware and electronic parts. We also had events like Quiz, Puzzles, Games and Movie Time. The chief guest was **Dr. S. Neelavathy Pari**, Assistant Professor, MIT Campus.

Compro' 18



Intra department event, “**Compro'18**” was conducted on 27th September 2018. We conducted three events namely Word connection, Smack-D-Bug and Mad-Ads.

Logo design

On 19th Dec 2018, we have conducted the **Logo design competition** for “**Array Express**” Newsletter for Computer Science department. Mr.Palanivel from 2nd B.Sc CS got First Place.

Workshop on “Research in the field of Computer Science”



On 6th September 2018 we have conducted the workshop on Research in the field of Computer Science. The resource person was **Dr. J. G. R. Sathiaseelan**, Head, Research Department of Computer Science, Bishop Heber College. The staff from the Department of Computer Science and Applications Shift I and Shift II along with the PG students attended the workshop.

Hardware and Networking Certificate Course

Computer Lab administrators has conducted **APC Hardware and Networking Certificate Course** in January 2019. There were 22 students attended the course.

Workshop on Career Guidance



On 20th December 2018; a workshop on Career Guidance was organised for 3rd students of the Department of Computer Science. The guest speakers were from VY Systems. The first session was handled by Mr. Abishek, Senior Manager - Customer Relationship, the second session was handled by **Mr. Ameen**, Senior Trainer and the third session was handled by Ms. Priyadharshini, Sr. Executive Human Resource, **VY Systems Pvt Ltd**. Total no of 47 students took part in the program.

Guest Lecture

Guest Lecture on “Cloud Computing” was conducted on 18th February 2019 by Mr. Nagaraj, Co-Founder of VGLENS. He has explained about how Cloud Computing was used in the real world.

As part of best practices our department initiated new initiatives like **General Orientation, Peer Updation, Virtual Learning, E Sharing, SOU.**

E-Sharing First Session

The Department of Computer science has conducted the first session on E-Sharing. The topic of the session was Object Oriented Programming (OOPS). The topic has been informed to the students and the questions were collected from the students for clarifications. The valid questions were consolidated by the coordinators and were sent to the resource person on 13th December 2018 through mail. On 15th December 2018 the session started at scheduled time (12:00pm-1:00pm) in Lab 1, students were gathered. The video call was through Skype. The resource person was **Mr. Swaminathan**, Senior Team Leader-Technical Integration, **CTS**. All the questions were answered by the Resource person. The students asked many queries and got clarified. The students were benefited by attending the session.



E-Sharing Second Session

The second session on E-Sharing was held on 5th February 2019. The topic was Database Management System (DBMS). The questions were consolidated and it has been sent to the resource person on 31st December 2019 through mail. The resource person was **Mr. Jeba Ashwin**, the session started at scheduled time (at 9.20:00am-10:15am) in Lab 1. The video call was through Skype and displayed in projector. All the questions were answered by the Resource person. The students asked many queries and got clarified.



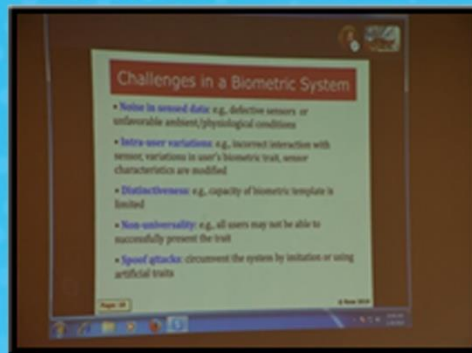
INTERNATIONAL WORKSHOP REPORT

The Department of Computer Science, Application (Shift I & II) and Mathematics together in collaboration with Computational Intelligence Research Foundation (CIRF) organized a two days International workshop on “Image Processing Using MATLAB” on 29th and 30th Jan 2019. Around 54 participants from 12 colleges have participated in the workshop.



The dignitaries are Dr. Munusamy (UGC, BSR faculty), Dr. Doreen Robin (Director, CIRF), Mrs. Mano Ranjithm (Vice Principal and Head, Dept of Computer Science), Mrs. Girja Ruby (Dean of Extension Activities) and Dr. Smilee Bose (Dean of Research and IQAC Co-ordinator).

The first session was on “Quality Research and Publication” by Dr. Munusamy. The second session was on “Image Processing using MATLAB” by Dr. Doreen Robin. The next day the third session was on “The Significance and Application of Image Processing” by Dr. Arun A. Ross (Prof., Michigan State University, U.S.A). He also interacted with the participants on Skype call. The resource person of session IV was Dr. Maruthu Perumal, (Prof & Head of Computer Science Department, NBKR Institute of Science and Technology, Andhra Pradesh). The session was on “Image Restoration and Morphological image processing using MATLAB”.



The Valedictory began with a Prayer Song which was followed by the welcome address. Mrs. Mano Ranjitham presented the report on two days workshop. As a token of love, all the dignitaries on the stage were presented with a sapling. The Chief Guest, Dr. Maruthu Perumal, presented the certificates to all the participants. The program concluded with the National Anthem.

LOGIN LAURUS ASSOCIATION ANNUAL REPORT 2019-2020

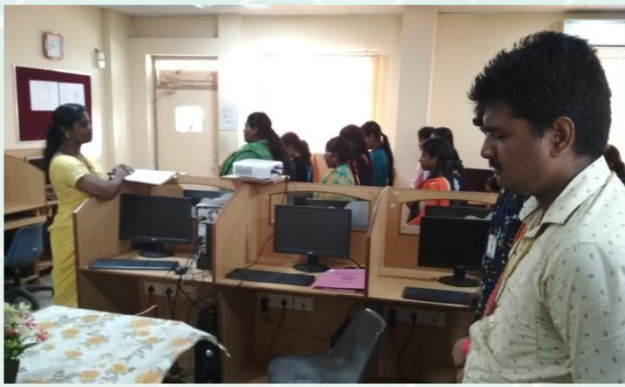


The Login Laurus Association of the Department of Computer Science organized “**Orientation Program**” for the students during the **odd semester** in the academic year 2019- 2020. It was conducted on **17th June, 2019** in Computer Lab. On **17th August 2019**, A one day workshop was conducted on “**Web Development**” in VY System. **Mohammed Ameer**, Full Stack Developer was the special invitee of the day. We send 28 students and 2 staffs to participate in the program. Then we had Workshop on “**Current Trends in IT**” on **26th August 2019**. The resource person was **Mr. Karthik Meenakshisundaram** (Senior Technical Architect). He educated the students How AI is virtually used in every existing technology, and creating entirely new categories. Next we organized an Intra department event “**Power Point Presentation**” on **18th September 2019** in Computer Lab. The judges were Ms. Bavya, Quality Analyst (Pyroferos Technology), Ms. Abhirami HR Manager (Randstad Technology) and Ms. Kiruthika, Assistant Professor and Head, Department of Computer Science, Soka Ikeda College of Arts and Science for Women. The given topics are **How Social Media Connect our Daily Life**. More than thirty students from various departments were participated in the power point presentation. Next we conducted **E-Sharing on Robotic Process Automation** on **30th September 2019**. The Resource person Mr. Joesph Prabhu, Project Leader in L&T, Handled the session through Skype. He explained the applicability of RPA in our scheduled events and regular jobs. He also explained the development of this process in future. As part of **best practices**, our department conducted **Peer Updation, Virtual Learning, E Sharing and SOU**.

Then during the **even semester** we organized an Internship program in “**Advanced Java with PHP**” on **21st December 2019** and **28th December 2019** in VY System. **Mohammed Ameer**, Full Stack Developer was the special trainer of the day. Next we conducted **E-Sharing on Devops** on **10th September 2019**. The Resource person was Mr. Santhosh Raj, Devops Engineer @ Corent Technologies. Handled the session through Skype. He explained the Concept of Devopss. He also explained the development of this process in future. Then we had an Intercollegiate Power Point Presentation on **12th February 2020** in the college auditorium. The resource person was **Mr. Thamizhananthan Krishnamurthy, Director and Partner-Novacis Digital Pvt Ltd**, Chennai was invited as the chief guest. Ms. Deepa Venkatesan, Technology Consultant, DXC technologies, Chennai and Mr. Abhilash Prabhakaran, Networking Engineer, TCS, Chennai came as the judges. The same day MOU was signed with an organization Graple for add on course in the presence of our Secretary, Vice Principal, Mr. Vishnu, CEO, Graple and Mr. Prabhu, Manager, Graple.

LOGIN LAURUS ASSOCIATION ANNUAL REPORT 2019-2020

**Gender equity, Rules and Regulation
by Ms.E.Mano Ranjitham**



Best Practices by Mr.M.Thiyagaraj



**One day workshop was conducted on
"Web Development" in VY System**



Intra Department "Power Point Presentation"



**Workshop Session by
Mr.Karthik Meenshisundaram**



Explained AI Technology by Mr.J.Ilamchezian



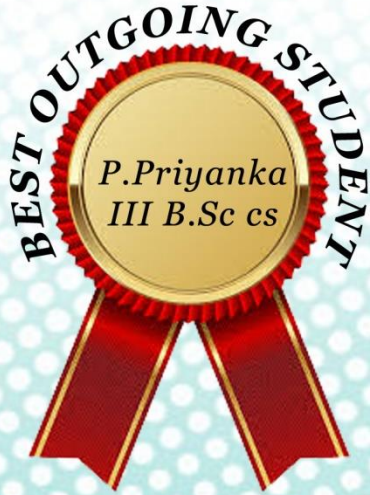
E-Sharing on Robotic Process Automation



Certificates Distributions to the students



UG – UNIVERSITY RANK HOLDER LIST



MAJOR

1 Nancy.K
Rank: 23

TAMIL

1 Renuka priya.N
Rank: 27

2 Benesha vidal.J
Rank: 43

3 Nancy.K
Rank: 53

4 Stephen richard.R
Rank: 65

5 Vinodh kumar.Y
Rank: 69

ENGLISH

1 Benesha vidal.J
Rank: 23

2 Renuka priya.N
Rank: 28

3 Nancy.K
Rank: 39

4 Stephen richard.R
Rank: 45

FACULTY DEVELOPMENT PROGRAM

Image processing using MATLAB

All faculties attended the International Workshop on “**Image processing using MATLAB**” on 29th and 30th Jan 2019, jointly organised by Computational Intelligence Research Foundation(CIRF) and the Department of Computer Science, Applications and Mathematics (Shift I & II), Nazareth College of Arts and Science, Avadi, Chennai-62.

Research

All faculties attended the Workshop on “**Research in the field of Computer Science**” on 6th September 2018, organised by the Department of Computer Science & Applications, Nazareth College of Arts and Science, Avadi, Chennai-62.

Decoding the NAAC New Framework

All faculties attended the State Level Seminar on “**Decoding the NAAC New Framework**”, on 6th Oct 2018, organised by Internal Quality Assurance Cell, Nazareth College of Arts and Science, Avadi, Chennai -62.

Data Science using Python

All faculties attended the National Level Workshop on “**Data Science using Python**” on 1st October 2018, jointly organised by Computational Intelligence Research Foundation (CIRF) and the Department of Computer Science & Applications, Nazareth College of Arts and Science, Avadi, Chennai-62.

Qualitative Research Methods

All faculties attended the Faculty Development Programme on “**Qualitative Research Methods**” on 28th July 2018, organised by Internal Quality Assurance Cell, Nazareth College of Arts and Science, Avadi, Chennai -62.

FACULTY ACHIEVEMENTS

Mrs. E.MANO RANJITHAM

ICASET18-International Conference –Multimodal Image Fusion in Medical Field-“An Eagle’s Eye View”
978-81-939929-1-3

Mr.M.THYAGARAJ

Presented at 3rd International Conference on Data Management, Analytics and Innovations (ICDMAI 2019) :”Enhanced Prediction of Heart Diseases Using Particle Swarm Optimization and Rough sets with Transductive Support Vector Machine Classifier”.

Mrs.R.KAVIYARASI

Published a research article on the topic “Implications of Data Mining Techniques and their Significance” in International Journal of Advances in Arts, Sciences and Engineering(IJOAASE).

Mrs. R.MEENAKSHI

She was invited by University of Madras for Under Graduate Practical Examination as External Examiner.
Co-ordinator of Cultural Committee.

STUDENT ACHIEVEMENTS

OVERALL TOPPERS LIST

M.VISHAL
I B.SC CS
80.7 %



S.KOUSALYA
II B.SC CS
83.7 %

P.RPIYANKA
III B.SC CS
90.2 %



Kishore.R
Thangadurai
Sathish.S

SPORTS ACHIEVEMENTS

	AMRITHA.S.A	HCL	
	MERLIN PREETA.M	HCL	
	JENIX SAGAYARAJ.S	HCL	
	BHARATH.S	HCL	
	YESHWANTHAN.A	TCS	
	SYLVAN.S	JUST DIAL	

PLACEMENTS

ACADEMIC Vishal.M Sulai Maan.S Bharath.J Vishal.M Infant Maria Louis.N Sulai Maan.S Sulai Maan.S Aadhilakshmi.K Deena Dayalan.A.S Rajeshwari.V Kausalya.S Saranya.K Bharath.J Preetha.J Sulai Maan.S Vishal.M Kausalya.S Ms.Priyanka	CULTURALS Rajeshwari.V Malarkodi.K Soniya.S Amrithaa.S.A Ranjitha.S Nandhini.P Aysha.D Nandhini.P Iswarya.S Narmatha.M Malini.R Janani.A Ranjitha.S Yamuna.S Sridevi.B Priyanka.p Sulaimaan.S	SUBJECT TOPPERS LIST I B.SC CS B.s.srujana deepthi Tamil-I D.pooja Hindi-I L.prathesh English-I M.vishal Maths-I K.bhavana C Program II B.SC CS S.kousalya Tamil-III M.hari kishanan English-III R.reshma c++ Program S.kousalya Statistics-I III B.SC CS P.priyanka OS P.priyanka Database S.amrithaa CA P.bhuvaneshwari VB



BEST PRACTICES



Virtual Learning



Appreciation tree for final years



Classroom seminars



E-Sharing



UG Internship Training



Peer Updation



Stop, Observe Update (SOU)



MOU with Various Organisations



Alumni Connect



Guest Lectures

UPCOMING EVENTS

- Guest Talk & News Letter Release

Photos

