

Chrono Bytz

THE NEWSLETTER OF THE
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

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Imagination is more
important than knowledge.

- Dr. Albert Einstein



Chrono Bytz
CSE231201ESV01I03

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Successfully signed up around 100
students for democracy.

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Dive into the world where code speaks
directly to the hardware.

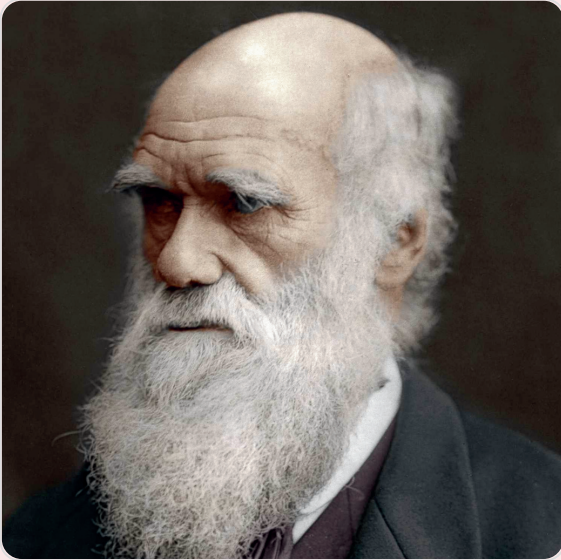
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A great deal of valuable thoughts for the
esteemed growth of India were born.

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Principles and values of the NSS were proudly
shared with the new age volunteers.

INSIGHTS & INSPIRATION

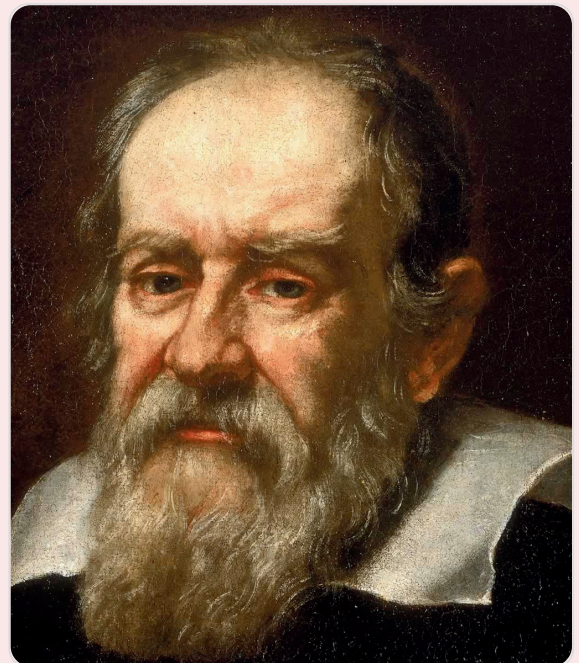


A man who dares to waste one hour of time has not discovered the value of life.

- CHARLES DARWIN

Mathematics is the language with which God has written the universe.

- GALILEO GALILEI



Reality exists in the human mind and nowhere else.

- GEORGE ORWELL



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PONGALO PONGAL FRIENDS!

The Computer Science and Engineering (CSE) Department joyfully commemorated Pongal with great enthusiasm and cultural pride. This traditional South Indian harvest festival signifies the sun's northward journey and serves as a time of gratitude for a plentiful harvest. The air was filled with vibrant decorations, traditional clothing and the sweet aroma of Pongal, fostering an atmosphere of happiness and togetherness. This event underscored the significance of cultural heritage and united students and faculty members in a memorable celebration. Students and faculty members participated in rangoli competitions, crafting intricate designs with colored powders that adorned the entrance of the department.....

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SPECIAL CAMP FOR THE REGISTRATION OF NEW VOTERS



A special camp for the registration of new voters was conducted on **December 8, 2023**, at **Kalaiarangam, FEAT**, as ordered by the District Election Officer. The event was organized under the supervision of **Dr. C. karthikeyan, The Dean of the Faculty**, with the assistance of **Dr. T. Balasankar**, Associate Professor in Engineering Chemistry section, **Dr. P. Anbalagan**, Assistant Professor in Dept. of CSE and two nodal officers, three student ambassadors and the **National Service Scheme**. The camp saw enthusiastic participation from numerous new voters and volunteers who came forward to register for their Voter ID.



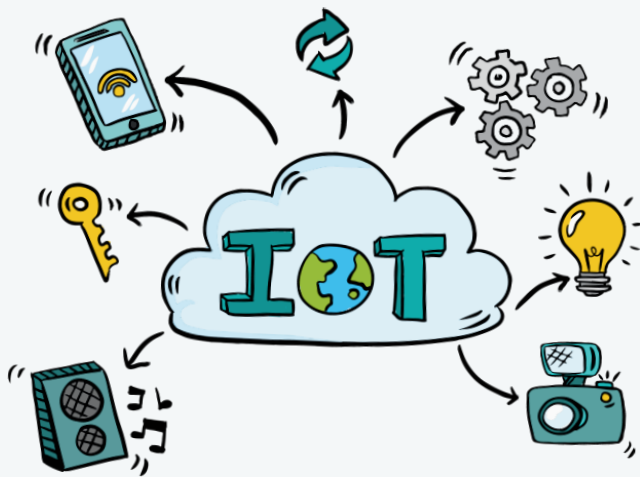
The event featured lively atmosphere with booths aiding registration, volunteers ensuring efficiency, distribution of informative materials and a documentary promoting democratic participation. Hundreds of new voters were registered, enhancing the community's democratic foundation. Dean expressed the gratitude to all involved in the successful camp.



“ Voting is the expression of our commitment to ourselves, one another, this country and this world. ”

— SHARON SALZBERG —

IOT AND AI: A MATCH MADE IN HEAVEN



creating a world where devices themselves and data drives intelligent decisions.

WHAT IS INTERNET OF THINGS ?

The Internet of Things (IoT) has transformed from a novelty into a ubiquitous network connecting billions of devices. This interconnected ecosystem, when combined with the power of Artificial Intelligence (AI), is catalyzing a revolution across industries and daily life. The synergy in IoT and AI is

THE DATA-DRIVEN SYMPHONY

- Data is at the heart of this transformation, with IoT devices such as smart home appliances and industrial sensors producing a continuous flow of information.
- This data covers a wide range, from environmental factors to equipment functionality, serving as the foundation for AI algorithms.
- AI serves as the orchestrator of this data symphony. Through analyzing extensive data sets, AI recognizes patterns, forecasts results and facilitates devices in acquiring knowledge and adjusting.
- This smart automation is leading to unparalleled efficiency and enhancement in different industries.

UNLOCKING POTENTIAL ACROSS INDUSTRIES

The combination of IoT and AI is already reshaping industries:

- **Smart Cities:** IoT sensors gather data on traffic, waste management and energy use. AI analyzes data to improve traffic flow, optimize waste collection and allocate resources efficiently.
- **Industrial Revolution:** IoT and AI enable predictive maintenance. Sensors monitor equipment health, AI forecasts breakdowns to prevent downtime and enhance productivity.
- **Personalized Experiences:** AI-driven insights enhance smart homes and e-commerce platforms. Smart homes adjust to preferences, e-commerce platforms offer customized recommendations.



A GLIMPSE INTO THE FUTURE

- **Healthcare:** Wearable devices and AI-powered diagnostics can monitor health in real-time, enabling early disease detection and personalized treatment plans.
- **Agriculture:** Smart farming leverages IoT sensors and AI to optimize irrigation, fertilization and crop management, increasing yields and reducing environmental impact.
- **Sustainability:** AI analyzes energy consumption data to optimize grid efficiency, promoting renewable energy integration and creating a more sustainable future.
- **Retail Revolution:** Smart shelves automate restocking based on inventory levels and analyze customer behavior to optimize product placement and promotions.

STRUGGLES AND STRATEGIES

While the potential benefits are immense, challenges must be addressed:

- **Data Privacy and Security:** The vast amounts of data generated by IoT devices raise concerns about privacy and security. Robust measures are essential to protect sensitive information.
- **Ethical Implications:** AI algorithms must be developed and deployed ethically to avoid bias and ensure fairness in decision-making.

The fusion of IoT and AI enables intelligent automation, efficiency, personalization and sustainability, transforming daily life and work with vast future possibilities. Overcoming challenges and seizing opportunities will unlock the synergy's full potential.

BY

Mr. S. Vijayan
NSS Student Co-ordinator
B.E. CSE (AI &ML) III Year



ARTISTRY



“ What we see in the world is a reflection of ourselves. What will you choose to see ? ”



BY
Ms. R. Keerthika
B.E. (CSE) II Year

NATIONAL ENERGY CONSERVATION DAY

The Department of Computer Science and Engineering at Annamalai University hosted Elocution and Essay Writing Competitions on December 7, 2023, at Phoenix'99 Hall, celebrating National Energy Conservation Day.

"ILLUMINATE THE PATH TO SUSTAINABILITY: EMBRACE ENERGY CONSERVATION EVERY DAY!"



Drawing Competition



Elocution

Event led by **Dr. N. J. Nalini**, Associate Professor and **Dr. G. Arulselvi**, Associate Professor, began at 2:30 P.M. with an Elocution competition. Participants shared their views on energy conservation in Tamil, delivering compelling messages that engaged the audience. The speakers skillfully combined emotion with facts, underscoring the importance of sustainable practices, creating a powerful impact.



Elocution

Following the impressive elocution performances, the stage transitioned to the Essay Writing Competition at 3:00 P.M. Participants penned their thoughts on the theme **"Save Energy, Save Money, Save Nation and Save the Planet"** in English and **"ஆற்றல் சேமிப்பு முறைகள்"** in Tamil.

The competition winners are as follows:

For **English Essay Writing**: **Jagan Mummudi Sridhar** claimed the *First prize*, while **Anushya** and **Kavya Priyadharshini** shared the *Second prize*.

In **Tamil Essay Writing**: **Dhivya G.L.** secured the *First prize* and **Keerthivasan S** was awarded *Second prize*.



Drawing Competition

At the **English speech competition**, **I.Hemavathi** secured the *First prize*, while **M. Anushiya** received the *Second prize*. In the **Tamil speech competition** **R. Madhumitha** was honored with the *First prize* and **S. Anbusezhiyan** earned the *Second prize*. **H. Suhaana** emerged as the *First prize* winner in the **Drawing competition**. **J. Amirthavarshini**, **B. Jayalakshmi**, **G. L. Dhivya** shared the *Second prize*. The event ended on an inspiring note, leaving a lasting impact on all participants.

FACULTY LEVEL COMPETITIONS



On **December 11, 2023**, In **GJR Hall** the Faculty Level Competitions hosted, marking a significant stage in the journey toward the celebration of National Energy Conservation Day.



Department-level winners from various departments competed to secure a spot in the grand event at Neyveli. The event began at 11:00 AM. The selected individuals were honored to represent their faculties on a larger platform. The participants gave their speeches about energy conservation in both English and Tamil and drawings from the department-level winners were presented to the panel of judges. The judges evaluated the performances and presentations thoroughly and announced the winners of the event.



Here are the list of Faculty level winners from Our Department.

Tamil Essay :

- **Dhivya G.L.** (*First Prize*)

Drawing :

- **Amirtha Varshini J** (*First Prize*)
- **Suhaana H** (*Third Prize*)
- **Jayalakshmi B** (*Third Prize*)

English Elocution :

- **Hemavathi I** (*First Prize*)

Tamil Elocution :

- **Anbusezhiyan S** (*First Prize*)
- **Madhumitha R** (*Third Prize*)



NATIONAL ENERGY CONSERVATION DAY 2023 - NEYVELI CELEBRATIONS

The grand culmination of efforts in celebrating National Energy Conservation Day took place on **December 14, 2023**, at the **Institution A/c Hall, Block-17, Neyveli-1**. Hosted by the Institution of Engineers (India) Neyveli Local Centre, the evening event recognized and celebrated efforts toward energy conservation. The esteemed **Er. M. Venkatachalam**, Director (Power) at NLC India Limited and Chairman of IE(I) Neyveli Local Centre, presided over the event, which began with a soulful prayer, setting a reflective tone.

Er. M. Venkatachalam delivered a **keynote address**, delving into the intricacies of power conservation and the critical role of individuals and institutions. The event's highlight was the distribution of prizes and certificates to winners from the faculty-level competitions at GJR Hall, Annamalai University and Neyveli schools. This inclusive approach underscored the diverse efforts in fostering energy consciousness.

A heartfelt vote of thanks expressed gratitude to all participants, organizers and sponsors. The evening concluded with a tea session and dinner, providing an opportunity for networking and camaraderie.



The National Energy Conservation Day celebration in Neyveli was more than an event; it was a manifestation of collective dedication to sustainable living. As participants dispersed, they carried with them a renewed sense of purpose and commitment to energy conservation. The evening in Neyveli stands as a beacon, guiding the way toward a future where every effort counts in preserving our precious energy resources.

VIKSIT BHARAT @2047: VOICE OF YOUTH

From **December 18th to 22nd, 2023**, an engaging event took place at **Phoenix'99 Hall** where students from the Computer Science and Engineering (CSE), CSE (Artificial Intelligence & Machine Learning) and CSE (Data Science) departments came together to participate in the Viksit Bharat initiative.



The extensive gathering highlighted the students' collective enthusiasm and dedication to contributing to the nation's advancement. **Dr. R. Bhavani**, the **Head of the Department**, spearheaded the event's organization, supported by **Dr. P. Aruna** to ensure its seamless execution.

Dr. G. Ramachandran and **Dr. P. Anbalagan** provided additional support, with **S. Keerthivasan** taking on the role of the leading student. During registration, students were given an overview of the goals and objectives of **Viksit Bharat @2047: Voice of Youth**, a program initiated by the Prime Minister on **December 11, 2023**. This initiative emphasizes the role of educational institutions in national growth.



“Ups and downs in life are very important to keep us going because a straight line even in an ECG means we are not alive.”

— RATAN TATA —



DID YOU KNOW

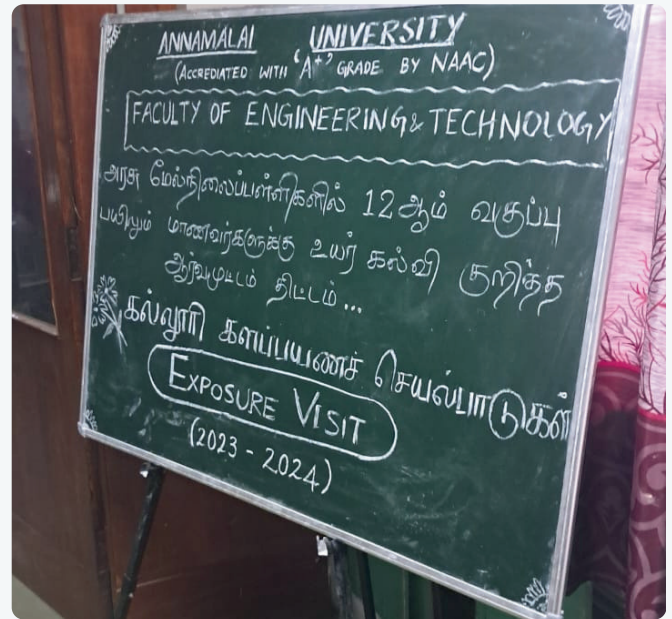
GDP, a crucial indicator of economic health, is profoundly influenced by a nation's youth. In India, the youth contribute up to 34% of the GDP. With 356 million young people, the world's largest youth population, India's economic potential is set to soar even higher, fueled by the energy and innovation of its dynamic young generation.

IoT PROJECT EXHIBITION

“IoT INNOVATIONS: BRIDGING THE GAP BETWEEN PHYSICAL & DIGITAL”

The IoT Lab at the institution held an IoT Exhibition on January 5, 2024, showcasing projects by third and fourth-year students to visiting school students. The aim was to raise awareness about IoT technology.

The exhibition started with a detailed session where students presented key components essential for IoT projects. They showcased Arduino, Raspberry Pi, UV sensors, LDRs, buzzers, Ethernet cables, breadboards, jumper wires, cables, providing a solid foundation for understanding how these components integrate into IoT systems.



Highlights included the Lewansoul H3S humanoid robot, which captivated the audience with its advanced movements and capabilities. The wireless car project demonstrated remote control technology, illustrated sustainable energy solutions.

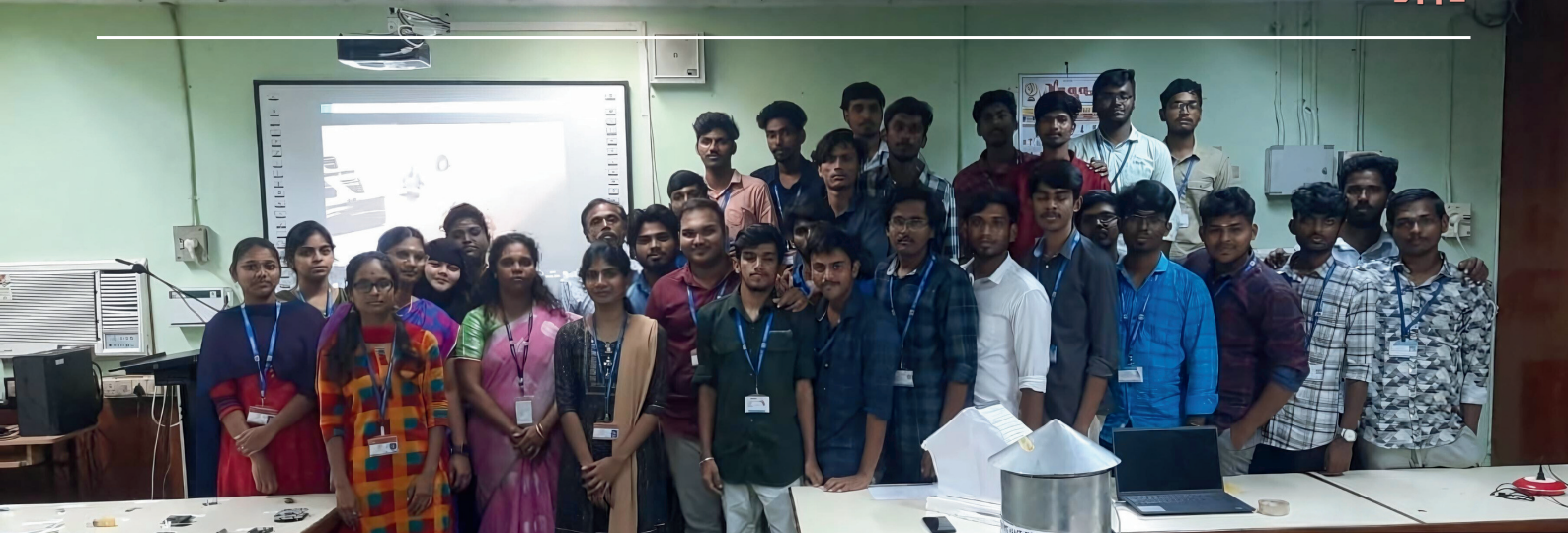
Following the component introduction, the spotlight shifted to the practical applications and projects. The students demonstrated an impressive array of IoT projects, showcasing their creativity and technical skills.



DID YOU KNOW

The Internet of Things originated with a “Coca-Cola vending machine” at Carnegie Mellon University, showcasing early capabilities like updating inventory and indicating beverage chillness.





The object detection car showcased automation and AI, the smart doorbell and grain tag initiatives aimed at enhancing daily life and reducing waste and the weather station project provided valuable information on environmental monitoring.



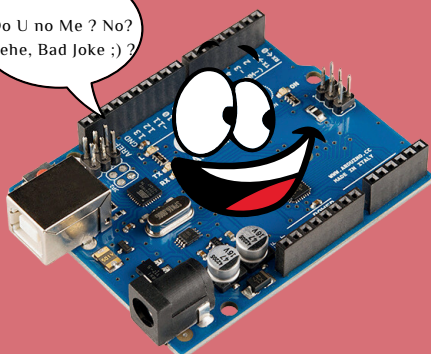
Components Demonstration

Under the guidance of **Dr. G. Prabhakaran** and **Dr. S. Mohan** the event was carefully organized to ensure smooth coordination and engaging presentations. Their leadership was instrumental in helping students deliver clear and captivating descriptions of their projects.

The IoT Exhibition involved school students in IoT technology, displaying various applications and sparking interest in tech careers. It emphasized student talent, innovation and dedication to nurturing creativity and technological progress. The event concluded by encouraging all participants to continue their journey in exploring and expanding the horizons of IoT technology.

KNOW YOUR
COMPONENTS

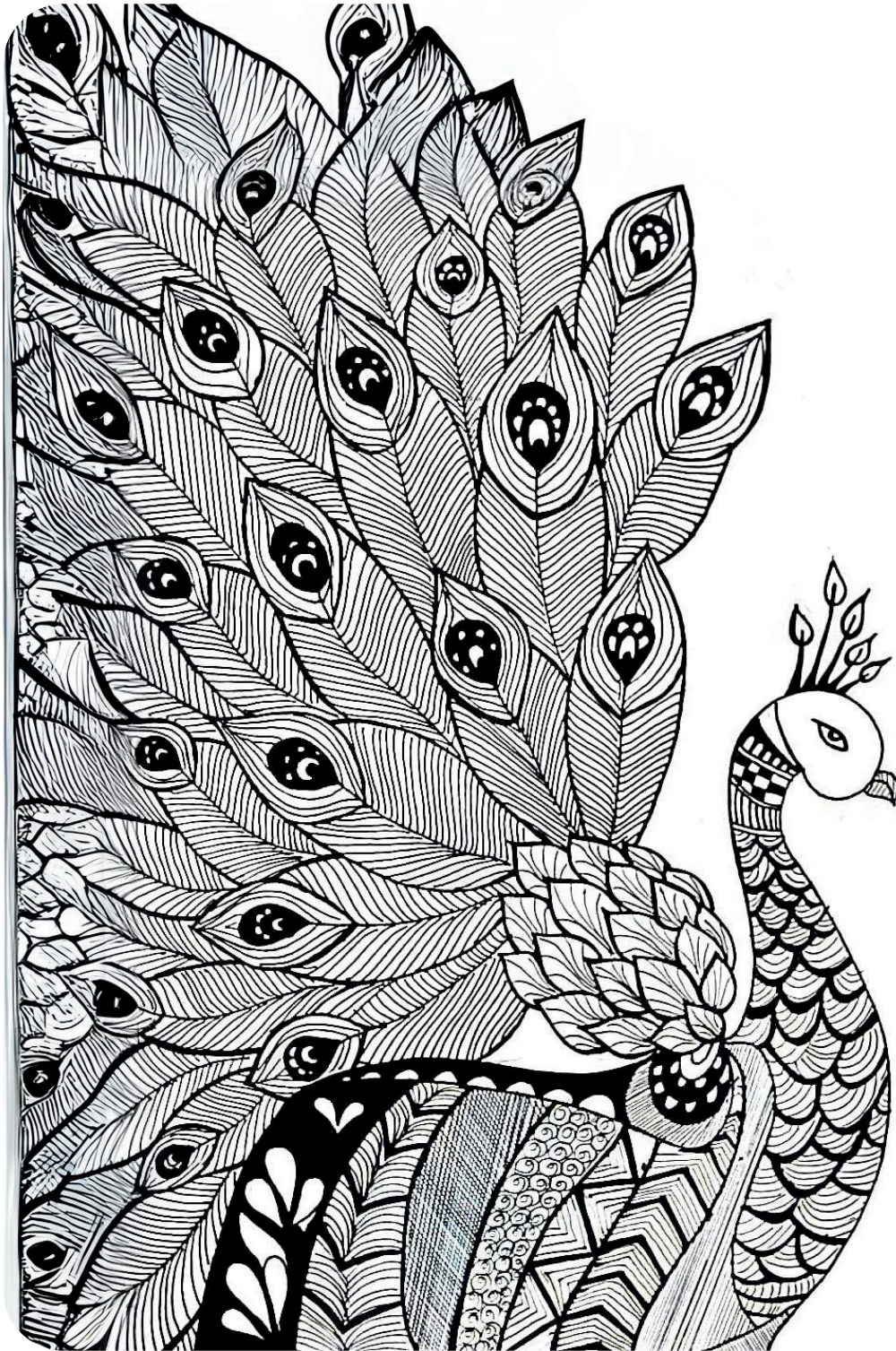
Do U no Me ? No?
Hehe, Bad Joke ;)



The Arduino Uno

Arduino boards have revolutionized the world of electronics and programming for hobbyists, students and professionals alike? Originally developed in Italy in 2005, Arduino boards are open-source microcontroller platforms that allow users to create interactive electronic projects with ease. These boards can be programmed using a simplified version of C++, making them accessible to beginners. With a variety of models available, including the popular Arduino Uno, these boards can interface with sensors, motors, lights and other devices, enabling endless possibilities for innovation. Whether you're building a simple LED blink project or a complex robotics system, Arduino provides a versatile and user-friendly foundation for your creations.

ARTISTRY

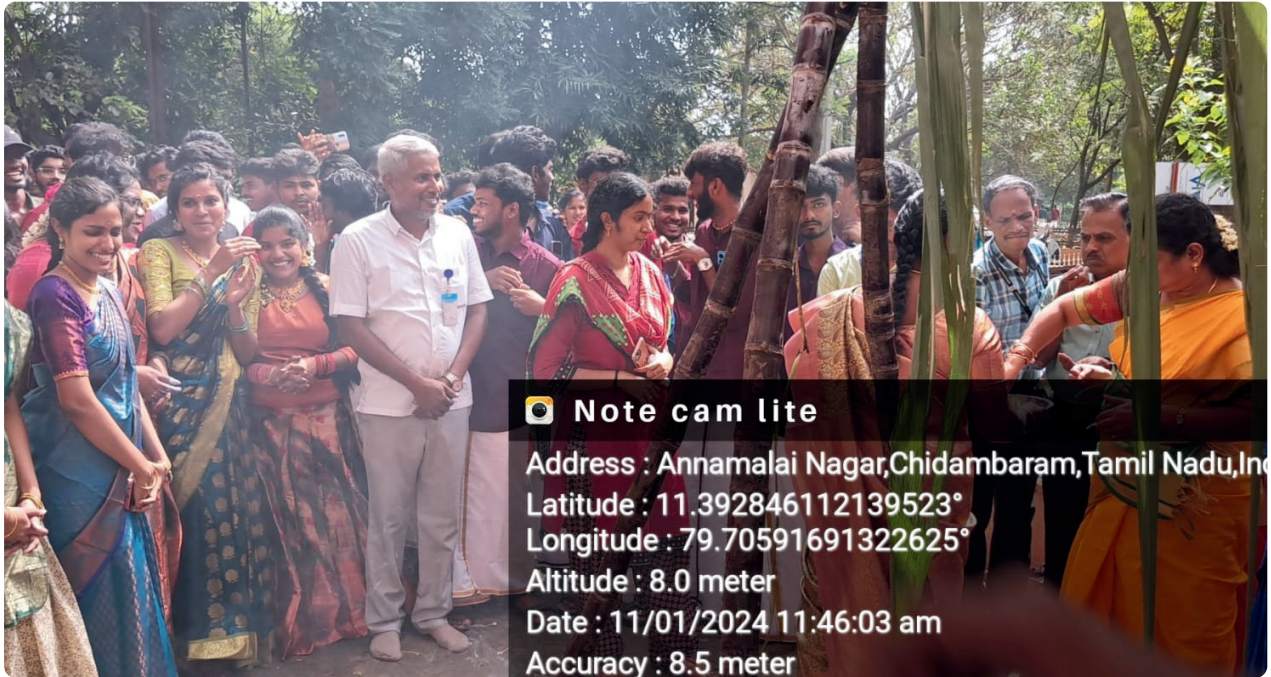


“ Life is a celebration. Let the vibrant hues of a peacock feather inspire you to always see the bright side ”

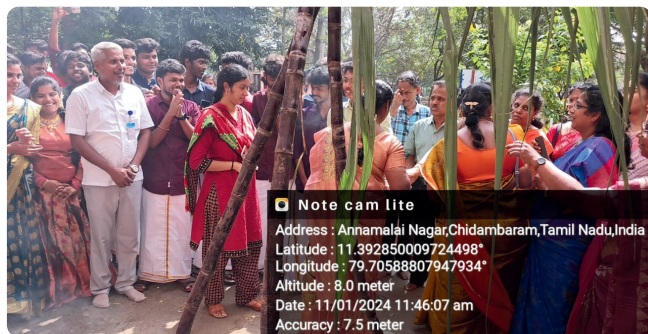


BY
Ms. V. Kaviya
B.E. (CSE) II Year

PONGAL CELEBRATION

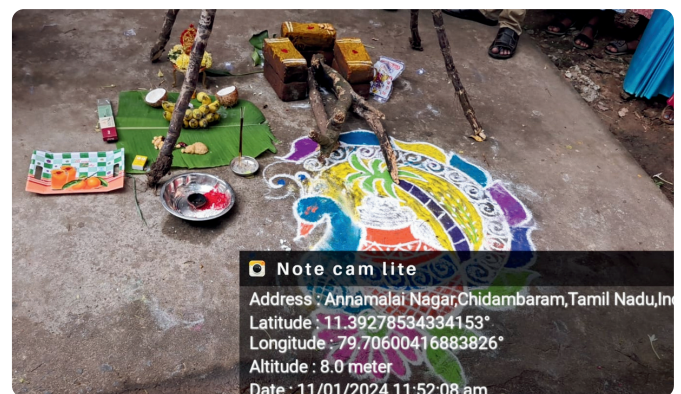


The CSE Department celebrated Pongal festival on **January 11, 2024** with great enthusiasm, embracing the cultural significance of this traditional South Indian harvest festival.



Pongal, celebrated in mid-January, marks the sun's northward journey, symbolizing prosperity and gratitude for the harvest. The venue featured vibrant rangolis, banana leaves and sugarcane, creating a festive atmosphere. Students in traditional attire prepared the Pongal dish, a sweet mix of rice, milk and jaggery cooked in earthen pots over an open fire,

with the boiling over of the pot symbolizing abundance. Everyone eagerly shared the delicious dish, enhancing the sense of community. The event provided a break from academic rigors, allowing students and faculty to immerse themselves in cultural festivities. It emphasize the



Rangoli By Students and Staff

Preserving cultural heritage and fostered unity and camaraderie among participants. The Pongal celebration in the CSE Department was a memorable occasion, showcasing joy, togetherness and cultural pride.

NSS ORIENTATION PROGRAMME



Chidambaram, Tamil Nadu, India
9PR4+835, Annamalai Nagar, Chidambaram, Tamil Nadu 608001, India

“EMPOWERING YOUTH FOR A BETTER TOMORROW.”

On **January 31st, 2024**, the NSS Orientation Programme was held at **GJR Hall** with the aim of providing new volunteers with an overview of the National Service Scheme (NSS), its objectives and their roles and responsibilities as members. The program was organized to acquaint participants with the principles of community service and to foster a sense of social responsibility among them. The event commenced with a Prayer session that emphasized the values of compassion, solidarity and selflessness, which are integral to the ethos of the NSS.

After the Prayer Session, **Mr. S. Vijayan**, NSS Student Coordinator, warmly welcomed all attendees during the orientation with a **Welcome Address**. He expressed his gratitude for their presence and highlighted the importance of community service and social responsibility. His words were inspiring, setting a positive tone for the activities ahead.



Welcome Address by Mr. S. Vijayan



Inaugural Address By Dr. R. Bhavani

This was followed by the **Presidential Address delivered by Dr. R. Bhavani, Professor and Head of the Department of Computer Science & Engineering** and highlighted the significance of the NSS orientation program and underscored the importance of youth involvement in community development initiatives.

The NSS Program Coordinator, **Dr. R. K. Kumar**, then delivered a **Keynote Address**, providing valuable insights into the objectives and activities of the NSS. His speech served to motivate and inspire participants, reinforcing the importance of their contribution to the NSS.



Special Address By Dr. R. K. Kumar



Felicitation Address By Dean

After the keynote speech, **Dr. C. Karthikeyan, Professor and Dean**, gave the **Felicitation Address**, highlighting the importance of community service and the NSS's contribution to improving social welfare. Dr. C. Karthikeyan commended the volunteers for their commitment and the institution's support for initiatives that benefit society.

Dr. P. Anbalagan, NSS Programme Officer, then delivered the **Report Proposal**, highlighting the importance of capturing key insights, learnings and recommendations from the event to inform future planning and implementation of similar initiatives. He emphasized the value of collaborative efforts and the role of community engagement in achieving sustainable outcomes.



Report Proposal By Dr. P. Anbalagan



Vote of Thanks By Ms. J. V. Vishnu Priya

The event wrapped up with a **Vote of Thanks** delivered by **Ms. J. V. Vishnu Priya**, recognizing the invaluable support, guidance and motivation received during the event. The program concluded with a patriotic touch as the National Anthem was performed.

The NSS Orientation Programme was a significant event that successfully instilled a sense of duty and social responsibility among the new volunteers. It highlighted the importance of community service and the active participation of youth in developmental initiatives.

REPUBLIC DAY PARADE - 2024

The committee members organized a screening test for NSS volunteers to participate in the **Republic Day parade** on **January 26, 2024**. **Mr. S. DHARMA**, a third year Computer Science and Engineering (AI & ML) student, was chosen to represent our University at **Chennai**.



கவிப்பேழை

உலகின் உயிர்கள்

உலகில் வாழும் உயிர்கள் அனைத்தும்
பூமிப்பந்துக்குள்ளே ஓரறிவு முதல் ஆறறிவு
உயிரினம் வரை இவ்வலகின் அதிசயங்களே !!
உயிரோவென்றால் உணர்ச்சிகளால் நிரப்பப்பட்ட
பொக்கிஷம் !

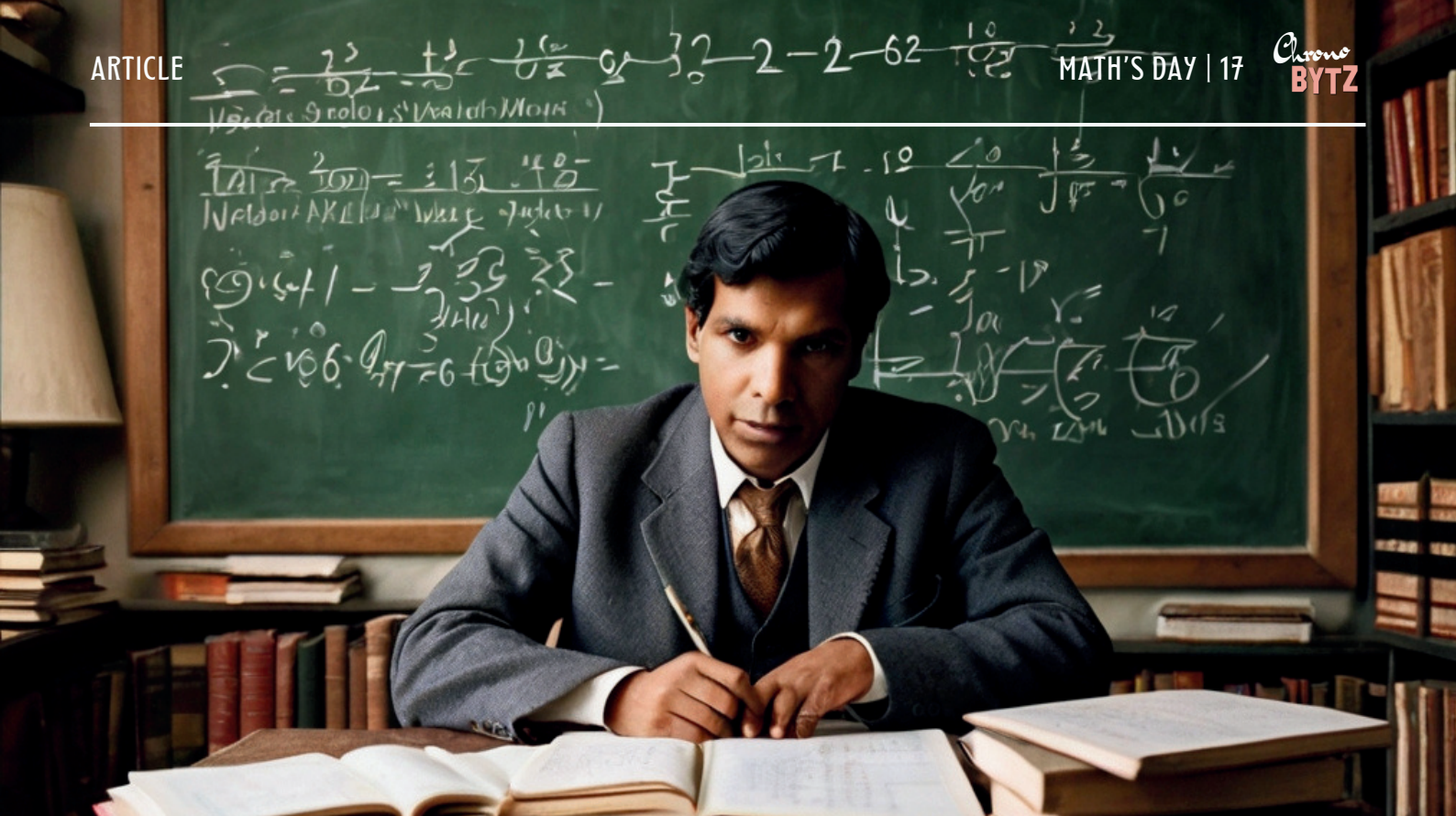
உயிரெழுத்தாகிய பன்னிரண்டும் உயிரோடு கலந்த
உணர்ச்சிகள் 'அ' என்ற உயிரில் தொடங்கி
'ஔ' வில் முடிகிறது உயிர்களின் வாழ்க்கை

உலகில் உள்ள உயிர்கள் காரணம் இல்லாமல்
படைக்கப்பட்டவையா இல்லை காரணம்
அறிவதற்காக படைக்கப்பட்டவையா !!

உலகின் உயிர்கள் நாம் அறிந்ததோ, அறியாததோ !
ஒவ்வொரு நாளிலும் புத்துணர்வு கண்டு
நாம் அடையும் அன்பே நம் உயிர்கள்



ஆக்கம்
ரா. ஜீவகாருண்யா
இளநிலை கணினி
அறிவியல் மற்றும் பொறியியல்
மூன்றாம் ஆண்டு



SRINIVASA RAMANUJAN: A SHINING STAR DIMMED TOO SOON

Srinivasa Ramanujan, born in 1887 in Erode, India, was a self-taught mathematical prodigy whose genius led him to become **one of the youngest Fellows of the Royal Society (FRS)**. His work, initially met with skepticism due to his lack of formal education, caught the attention of British mathematician **G. H. Hardy** in 1913. Hardy, along with J. E. Littlewood, recognized his talent and invited him to Cambridge. Despite initial resistance due to his Brahmin beliefs, Ramanujan moved to England in 1914, where he and Hardy made significant mathematical discoveries. Ramanujan earned a Bachelor of Arts by Research in 1916

DID YOU KNOW

Who is the first Indian to get the Fellow of the Royal Society title?

Ardaseer Cursetjee Wadia

and was elected to the London Mathematical Society in 1917. In 1918, he became the second Indian and youngest person to become Fellow of the Royal Society and the **first Indian Fellow of Trinity Cambridge**.

However, the harsh English climate deteriorated his health, leading to his return to India in 1919, where he died in 1920 at age 32. Ramanujan's notebook often lacked proofs, contained profound results, that later mathematicians, like Bruce C. Berndt, verified. In 1976, George Andrews discovered a "**lost notebook**" with additional findings, cementing Ramanujan's legacy in mathematics.



National Youth Day- 12th January

Inspire and empower the youth of India to embody Swami Vivekananda's ideals of courage, compassion and self-reliance. Foster a sense of responsibility and leadership to drive positive change and national development.

Department of Computer Science and Engineering

Faculty of Engineering and Technology

Annamalai University

Annamalai Nagar-608002

E-mail : aucse2012@gmail.com



Feedback related to the Newsletter can be sent to aucsenewsletter2023@gmail.com

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About the Cover:

Illustrated by **Mr. R. Amirthanathan**

Theme:

The illustration features Santa Claus joyfully packing an expensive Graphics Card into a Christmas-themed box. The background is a high-tech workshop with festive decorations, including a brightly lit Christmas tree and various expensive computer accessories.