



# **PAAVAI**

**EDUCATIONAL INSTITUTIONS**

Think Education... Think Paavai.

NH-44, Paavai Nagar, Pachai, Namakkal - 637 018

# **PAAVAI VOICE**

**JULY - 2025**

**A MONTHLY BULLETIN**

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|                 |   |                                                              |
|-----------------|---|--------------------------------------------------------------|
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## Chairman's message

Dear parents and students!

Greetings from your Chairman

It gives me immense joy to extend my heartfelt greetings to students as the first year classes have commenced for Pavaai Arts and Science College for Women. This milestone marks not only the beginning of their academic journey but also the continuation of our institution's commitment to nurturing knowledge, values, and holistic development. As these young learners step into the portals of higher education, I urge them to embrace curiosity, discipline, and integrity, which will serve as the foundation for the future.

In Paavai, we also strongly believe in the role of culture and values in education. Paavai is not only a hub for academic pursuits but also a platform to preserve and promote creativity, traditions, and cultural expressions. Students are encouraged to participate in debates, literary forums, cultural festivals, and artistic activities that foster self-confidence, leadership, and teamwork. This holistic approach ensures that they emerge as well-rounded individuals capable of excelling in any field they choose.

Also, the achievements of our alumni in diverse walks of life stand as a testimony to the strength of our vision. Through collaborative learning, dedicated mentoring, and exposure to modern knowledge systems, our students have consistently contributed to industry, research, governance, and social service. We take pride in being an institution that not only imparts education but also nurtures responsible citizens who carry forward the values of compassion, sustainability, and innovation.

Furthermore, Research and innovation form the backbone of academic excellence and societal progress. Our institution is committed to fostering a culture where students and faculty are encouraged to think critically, question deeply, and explore new frontiers of knowledge. By engaging in research that addresses real-world challenges and by developing innovative solutions, we not only enrich academic learning but also contribute meaningfully to the community, industry, and nation at large.

Our institution has always strived to create a positive societal impact through meaningful initiatives. To create social sensitivity, events such as road safety awareness and free eye camps reflect our dedication to community well-being. By sensitizing people to the importance of safe practices and providing access to healthcare, we contribute to building a responsible and healthy society. Alongside, our encouragement of research and innovation enables students and faculty to generate knowledge that addresses real-world issues and adds value to both the academic and social fabric.

Moreover, as you begin this new chapter of life, remember that education is not merely about acquiring degrees but about shaping character and contributing positively to society. Stay focused, make the best use of opportunities, and uphold values of empathy, perseverance, and excellence. With sincerity in learning and humility in action, you can not only fulfill your aspirations but also become torchbearers of progress and compassion. Together, let us strive to build a future where education, compassion, and innovation go hand in hand. May our students rise to their fullest potential and bring pride to the institution through their knowledge, service, and commitment to society.

Warm regards,

Chairman

## Pavai Arts and Science College for Women Inauguration of First Year

The First-Year Inauguration Ceremony for the 2025-26 batch was held at Pavai Arts and Science College for Women in Dheeram on 02.07.25. The ceremony began with Smt. Mangai Natarajan, Correspondent, Paavai Educational Institutions, lighting the lamp alongside dignitaries, followed by bhajans and slogan chanting. Dr. K.K. Ramasamy, Director-Admin, Paavai Educational Institutions welcomed the gathering.

Shri. CA.N.V. Natarajan, Chairman, Paavai Educational Institutions, inaugurated the first-year classes and greeted the parents and the students. In his presidential address, he highlighted the sacrifices made by the fathers for their children emphasizing the importance of recognizing the hard work that goes into shaping their futures. He elaborated on the values behind the acronym ADMIRE - Attendance, Discipline, Maximizing Academics, Respect, and Empowerment and stressed the significance of regular attendance to value their parents' efforts.

Smt. Mangai Natarajan, in her felicitation address, shared the inspiring journey of the institution's growth from 18 students to over 15,000 today. She highlighted the importance of earning recognition and self-respect of woman through studies and knowledge rather than relying on reservations. The ceremony was attended by Mr. K. Senthil, Director-Admissions, Principals, faculty members, students, and parents. Dr. N. Ezhili, Senior Principal, Pavai Arts and Science College for Women proposed the vote of thanks, followed by the National Anthem. The event concluded with a vibrant cultural performance by the second and third year students.



## Induction Programme for the First year students of PASCW

A five day Induction Programme, was organised by Faculty Development department, for the first year students of PASCW. The Induction Programme was held from 07.07.25 to 11.07.25. Shri.CA.N.Natarajan, Chairman, Paavai Educational Institutions presided over the function, inaugurated the Induction Programme and ingrained Paavai values in the minds of the students. Smt. Mangai Natarajan, Correspondent, Paavai Educational Institutions offered felicitations and welcomed all the first year students. Shri.CA.N.V.Natarajan, Chairman, Paavai Educational Institutions conducted the session on the topic entitled 'Goal Setting'. Mrs.M.Vimala, HoD, first year, PCE delivered her speech on 'Paavai Culture'. Dr.J.Murshitha Banu, Head, FDD, PEC elaborated on the essence of 'Be Fluent'. She acquainted the students with the skills of English language such as Listening, Speaking, Reading, and Writing.

Dr.M.Premkumar, Principal, PEC spoke on the title 'Involve to Evolve'. He expounded the topic by focusing on participation and involvement in academic and non-academic activities of the college. Dr.C.Jayalakshmi, Dean Counseling, Paavai Institutions delivered her speech on 'Transition from School to College'. Dr.N.Ezhili, Senior Principal, PASCW in her topic entitled 'Biomimicry' explained as Biomimetics which is the practice of drawing inspiration from nature to solve human problems. Dr.Hepsi Rachael Chellarani, Principal, PCNR, highlighted on the topic 'Health and Hygiene'. Dr.D.Banumathy, CSE, HoD, PEC delivered on the title 'Be Liberated Be Happy'. Dr.K.Sundaramurthy, Head, IQAC, PEC addressed on 'Time Management'. Dr.Hepsi Rachael Chellarani, Principal, PCNR, addressed the students on 'Life Saving Skills'. Mrs.S.Sasikala, HoD, Mathematics, PASCW delivered her speech on 'Examination System.' Dr.R.Mohanapriya ASP, ECE, PEC elaborated on the significance of 'Online Learning Tools'. She listed out the different online learning tools for enhanced learning. Mr.Thamaraiselvan Dean, Placement and training, PEC, spoke on 'Career Development'. Totally, 267 students were benefitted.



## Eye Awareness Programme

Paavai Paramedical Institutions organised an 'Eye Awareness' Programme in collaboration with Dr. Agarwal's Eye Hospital on 16.07.25 at Pragathi Hall, Paavai Institutions. The program commenced with a welcome address by Ms. S. Pooja, IV Pharm.D, Paavai College of Pharmacy and Research. The presidential address was delivered by Shri CA. N. N. Natarajan, Chairman, Paavai Institutions. Smt. Mangai Natarajan, Correspondent, Paavai Institutions felicitated the gathering.

Dr. R. Sivakumar, Principal, Paavai College of Pharmacy and Research, Dr. A. Hepsirachel Chella Rani, Principal, Paavai College of Nursing and Research, Dr. C.K. Muralidharan, Principal, Paavai Physiotherapy Science College and Dr. P. Chitra, Principal, Paavai Institute of Allied Health Science were present. Around 20 faculty members and 650 students from various Paavai Paramedical Institutions attended the awareness session. The keynote speech was delivered by Dr. VishnuPriya, MBBS, M.S (Ophthal), FICO, Senior Consultant - Ophthalmologist, Dr. Agarwal's Eye Hospital, Namakkal Branch. She spoke on the topic 'How to Protect Eyes in This Modern Era', highlighting the importance of vision care. The program concluded with the vote of thanks proposed by Dr. R. Sivakumar, Principal, Paavai College of Pharmacy and Research, Namakkal.



## The Cultural Extravaganza by PASCW

On 22.07.25, the first year students of PASCW captivated their seniors with an energetic and enlightening performance at Dheeram Hall. The cultural extravaganza, featuring participants from various departments, was graced by the presence of our Chairman and Correspondent. The seniors were thoroughly entertained and appreciated the affection, creativity, and dedication that went into the vibrant performances. The Chairman commended the first year students as well as the faculty trainers and the student trainers from the second and third year students for their exceptional efforts and teamwork in making the event a grand success.



## The Bharat Scouts and Guides - West Zone Camporee 2025

The Bharat Scouts and Guides, Tamil Nadu, successfully conducted the West Zone Camporee-2025 at PASCW, from 24.07.25 to 26.27.25. The Inaugural Ceremony was honored by the presence of distinguished dignitaries, including state officials, district association leaders, and institutional heads, setting the stage for three dynamic days filled with leadership training, skill-building, cultural exchange, and unity among Scouts and Guides. Dr.A. M. Mathivendhan, Minister, Adi Dravidar Welfare, Tamil Nadu, State President of Bharatha Saranaya Movement, delivered an inspiring keynote address. Mrs. Durgamoorthi, I.A.S., District Collector Namakkal, and Ms.V.G. Maheswari, CEO, Namakkal, motivated the participants with their impactful speeches.

Sri CA. N. V. Natarajan, Founder & Chairman, Paavai Educational Institutions, graced the event with his valuable support and presence. Scout Troops from 28 districts actively participated, including Dharmapuri, Harur, Palacode, Krishnagiri, Namakkal, Thiruchengode, Salem, Coimbatore, Erode, and Tirupur. Participants enthusiastically took part in March Past, Colour Party, Band Display, Physical Exercises, Folk Dance, Food Plaza, Tent Pitching, and Camp Craft competitions. Their energetic involvement and discipline were highly appreciated. The camp concluded with a valedictory session, where dignitaries awarded certificates and medals to recognise the students' excellence. The event ended with the National Anthem, marking a grand and respectful closure.



## Review and Re View Programme for PASCW Students

On 21.07.25, a session on Review and Re-View was conducted in Keerthi for the second year students of PASCW. The Chairman emphasised the importance of setting SMART (Specific, Measurable, Achievable, Relevant, Time-bound) goals. He highlighted the steps involved in goal setting, including identifying one's goal, setting objectives, listing skills and strengths, identifying people who can help, developing a plan, and listing the benefits of achieving the goal. He stated the importance of knowing oneself, including one's interests, talents, personality, strengths, and weaknesses. He also stressed the necessity to understand the need to achieve one's goal. The SMART criteria were presented as a framework for setting effective goals.

He presented various statistics on goal setting: 23% of people have vague goals, 45% of people have written goals but don't review them, 14% of people have written goals and review them regularly, and 2% of people have written goals, review them regularly, and act towards achieving them. He provided valuable tips for success, including setting clear and specific goals, breaking down large goals into smaller, manageable tasks, staying focused and motivated, and continuously working towards one's goals with perseverance and endurance.

He also emphasised that success in one's career comes from great starters, high-quality knowledge, endurance, and continuous work. He emphasized Perseverance as a key factor in preparing for and attending competitive exams. He instigated the students to set SMART goals and follow the steps outlined in the session to increase their chances of achieving success. He concluded the session by enthusing them to achieve university rank, which can fetch several rewards, gain recognition, prestige, enhance career opportunities and promotions. He also assured that he will guide the students to achieve their goals and shape their career. Students gave feedback for the chairman session, which enriched them with his worthwhile experiences.



## Road Safety Awareness Programme

Youth Red Cross and National Service Scheme, PASCW jointly organised a 'Road Safety Awareness Programme' at Keerthi Hall on 03.07.25. The programme commenced with a prayer song, followed by a warm welcome address delivered by Ms. S. Jamuna Lakshmi, III B.Sc. Nutrition and Dietetics. The awareness programme was conducted for all NSS and YRC volunteers to encourage and motivate them to follow road safety rules. The Principal, PASCW, Dr. M. Revathi, addressed the gathering and explained the objectives of NSS and YRC. Er. C. Subramaniam, M.E., ADE (Highways), Road Safety Wing, Salem, the resource person delivered an informative session on road safety rules and regulations. He emphasised the importance of driver behaviour and to reduce the prevalence of dangerous driving by avoiding the use of mobile phones.

He also explained how to use the five senses eyes, nose, ears, tongue, and skin effectively while driving. To make the session more impactful, he illustrated the causes of road accidents using various video clips. Additionally, he provided insights into different road safety schemes and encouraged all the road users to adopt safe practices such as wearing seat belts, following traffic rules, and avoiding distractions. The session was engaging, and all students participated with enthusiasm. K. Shanthi, II B.Sc. Mathematics proposed the vote of thanks and the programme came to end with the National Anthem.



## Academic Events

An Online 'SAP HackFest Challenge 2025- First regional round' organised by the Department of CSE(IOT) in association with Entrepreneurship Development Cell (EDC) and the Institution's Innovation Council (IIC), collaboration with NeXtGrids, PEC on 02.07.25. The chief guest was Mr. Dharshan Kasaravalli, Founder and CEO, Greentick, Bangalore.



The Department of Computer Science, PASCW organised a successful event titled 'BRAIN TECH' on 14.07.25 featuring four exciting activities that showcased the talents of students. The first segment titled 'BRAIN TECH' and 'EDUTAINMENT GAMES' included fun and engaging events such as 'Challenger' 'Memory Capture', and 'Mind Reader'. It was conducted by Ms. R. Sangavi and Ms. S. Brindha, II B.Sc. (CS). Ms. J. Sahana, III B.Sc. (CS) presented the topic 'Microprocessor'.



The Department of ECE, PEC under the aegis of the AI Task Force and in collaboration with IETE, hosted an impactful guest lecture titled 'Embracing the Greatest Technological Shift of Our Time' on 16.07.25. Mr. Maheswaran Venkatachalam, Engineering Director, Databricks, California, USA was the resource speaker. Dr. R. Mohana Priya, ASP & Head, ECE, Mr. S. Loganathan APECE and Mrs. K. Thendral, AP, ECE, coordinated the event. 180 faculty members from PEC, PCE, PASCW attended the special lecture.



On 18.07.25, PASCW paid a vibrant tribute to the legendary Karmaveerar Kamarajar, former Chief Minister of Tamil Nadu, by celebrating his birth anniversary. The Departments of Tamil and English jointly organised a dynamic series of competitions at Arivananda Arangam, showcasing the talents of the students. Under the guidance of the Principal, the event was conducted smoothly, providing a platform for students to exhibit their talents and pay homage to Karmaveerar Kamarajar's legacy.



The Department of Commerce, PASCW organised a webinar on the topic 'Overview of GST' on 18.07.25. The session was delivered by Dr. A. Arumugam, Prof. and Head, School of Commerce, Vel Tech University, Avadi, Chennai. He focusing on the features of GST, importance of GST, benefits, Challenges and the implementation of GST. The topics discussed by the speaker were insightful and helpful to the students. The session was highly informative and beneficial for the students and faculty members.



The Department of EEE in association with the IIC and the ISTE, PEC organised an enlightening guest lecture on 'Angel Investment and VC Funding: Opportunities for Early-Stage Entrepreneurs' on 19.07.25. The resource person Mrs. A. Nesapriya, MBA, Investment Advisor at Cholamandalam Securities Limited, Bangalore, highlighted on extensive expertise in financial markets, startup funding and investor networking.



The Department of Aeronautical Engineering, PEC organised a 5 Day Drone Skill Development Training Programme in the field of 'Drone Technology' from 21.07.25 to 25.07.25 for the students from different disciplines across PEC and other Paavai Institutions. More than 50 participants attended this training program. The objective of the event was to familiarize about the latest drone technology. They were also given insights about the various skills demanded by the drone Industries.



The Dept. of CSE, PEC organised a seminar on 'Early Stage Entrepreneur' incubation opportunities, for the students and the faculty members on 19.07.25. Mr.B.Tamilarasu, Operation Head, Lakshmi InfoTech Solution, Madurai, shared his expertise on how incubation centers support early stage entrepreneurs by offering essential resources such as mentorship, funding, infrastructure, and networking opportunities. Participants learnt about the entrepreneurial ecosystem and the critical role of incubation in accelerating growth.



On 28.07.25 the Math Association, PASCW organised an event titled 'INFINITY MAZE-A Math Journey'. In 1913, Srinivasa Ramanujan, mathematical genius sent a letter filled with groundbreaking theorems to the renowned British mathematician G.H. Hardy at Cambridge University. Impressed by his brilliance, Hardy invited Ramanujan to Cambridge, His life story was portrayed in the film 'The Man Who Knew Infinity', starring Dev Patel in 2015 was telecast to the students.



PASCW, successfully hosted an exhilarating Adventure Game Event on 28 & 29.07.25. The event was graced by the esteemed presence of Shri CA.N.V. Natarajan, Founder and Chairman, PEI, whose support and encouragement added immense value to the occasion. This Adventure Game Event was meticulously designed to foster physical strength, mental alertness and team spirit among the students. The event featured a range of exciting games and challenges that tested the students' physical and mental capabilities while promoting teamwork, strategy.



On 29.07.25, the English Literary Association, PASCW organised an engaging event titled 'The Battle of Literature'. Students from the English Department were divided into two teams: the Wordsworth Club and the Coleridge Club and they enthusiastically participated in a dynamic literary quiz. Students from other departments also joined in showcasing their literary talents contributing to the vibrant atmosphere.



The IIC in association with Department of BME has organised a session on 'Identifying Societal Challenges through UN Sustainable Development Goals' on 30.07.25. Mr.Manoj Mathialagan, Head Presales Engineering, MapSDG, Chennai was the resource speaker who delivered an insightful lecture on Identifying Societal Challenges. The event was presided over by Dr.V.Hariharan, M.E., Ph.D., Principal, PCE who emphasised the crucial role of 17 UN Sustainable Development Goals.



## Social Sensitivity

On 06.07.25, Paavai TQI volunteers conducted a parents-teacher and DOD (Day of the Doctor) session in Bodinayakkanpatty and Alanganatham, the Namakkal cluster. The session fostered strong interaction between students and parents, covering topics like the NMMS and TRUST scholarship programs, upcoming summit and thematic sessions. Students participated in the Sangamam shared their experiences and memories.



On 17.07.25, Paavai TQI volunteers visited Government Higher Secondary School, Ayothipatinam. The team successfully collected the student details for TNPSC preparation and held a 'Diary of Dreams' session where the students confidently shared their goals. A high-energy Summit class followed, praised by teachers for its positive impact on students' thinking. The sessions included self-introductions to boost up confidence, concluded successfully.



On 18.07.25, Our Paavai TQI volunteers visited Muthugapatty village and successfully conducted Parents Meet and Diary of Dreams session. The meeting fostered strong interaction between the students and the parents and included discussions about upcoming summit and thematic sessions. The session concluded with an engaging activity and homework, wrapping up a successful and wonderful day.



On 20.07.25, Paavai TQI volunteers visited Palayapalayam and Sivanayakanpatty village and conducted Parents Meet and Diary of Dreams (DOD) session. There was an impressive interaction between the students and the parents with discussions about upcoming summit and thematic sessions. Students participated in Sangamam shared their memories and experiences. The session concluded with an engaging activity and homework, making it a wonderful and successful day.



On 23.07.25, Paavai TQI volunteers in Palayapalayam and Sivanayakanpatty organised an inspiring science session for over 150 students with Arivarasan Anna. The session sparked curiosity and featured meaningful discussions on science experiments aligned with the 6<sup>th</sup> grade syllabus, which the Kanaa team plans to implement this academic year. Future science-based sessions for 7<sup>th</sup> and 8<sup>th</sup> graders were also discussed with Anna's guidance. Students were highly enthusiastic, enjoying the interactive learning experience.



To promote cleanliness, NSS,PCE actively participated in a cleanliness drive organised by the institution on 30.07.25, as part of the Swachh Bharat Abhiyan. The Swachh Bharat Mission, reflected the Government's vision as articulated in the address of the President of India, paid tribute to the ideologies of Mahatma Gandhi and commemorates Azadi Ka Amrit Mahotsav. The NSS volunteers also raised public awareness by holding placards and informing the local community about the importance of clean and healthy surroundings.



Paavai Engineering College, National Service Scheme, provided volunteership for Atthanoor Amman Kovil, Salem, Vilakku Pooja on 28.07.25 along with 44 volunteers (12 Boys, 32 Girls). They rendered their service for food serving and Vilakku Pooja.



YRC, PASCW Yoga and Naturopathy, the Indian Red Cross Society, and Sri Gokulam Mission Ayurvedic on the occasion of International Yoga Day, 23 YRC students, accompanied by Dr. M. Deepa, AP, Maths and Mrs. T. Amutha, AP, Commerce, PASCW. YRC volunteers participated in the Rally at Namakkal on 21.07.25 organized by Government Siddha Medical College and Hospital, Department of Yoga. They created an awareness on the importance of Yoga and the benefits.



## SYNTHETIC DATA : A GAME - CHANGING SOLUTION FOR RESEARCH

In the ever-expanding world of research, data plays a pivotal role in unlocking insights, validating hypotheses, and driving scientific progress. However, the availability of high-quality and privacy-sensitive data has become a significant challenge. This is where synthetic data emerges as a game changing solution.

Synthetic data, a concept gaining increasing recognition, refers to artificially generated data that mimics the statistical properties of real data while ensuring privacy and confidentiality. Additionally, with its growing importance, synthetic data offers researchers a valuable tool to overcome limitations related to data scarcity, privacy concerns, restricted access to sensitive datasets and ensure ethical practices.



In this article, we explore the fascinating world of synthetic data and its relevance in research.

### Understanding Synthetic Data

Synthetic data replicates real data's statistical properties while protecting privacy. It is generated using algorithms like GANs or VAEs, it mirrors distributions, correlations, and patterns. This allows researchers to work with sensitive data while safeguarding identities and complying with regulations.

### Synthetic Data in Research Perspectives

Synthetic data offers significant benefits for research.

#### Overcoming Data Scarcity:

Synthetic data addresses limited data availability, expanding sample size and diversity for enhanced statistical power and generalizability.

#### Privacy Preservation:

It generates new data unlinked to individuals, ensuring confidentiality and enabling research on sensitive topics.

### **Exploration of Sensitive Scenarios:**

Synthetic data enables the study of rare or sensitive events facilitating research on difficult or unethical observations.

### **Unlocking New Possibilities for Analysis and Modeling:**

It provides a controlled environment for hypothesis testing, model development, and methodological advancements across research domains. Consequently, researchers can leverage synthetic data's potential to make significant strides in their research and contribute to scientific discovery.

### **Advantages of Synthetic Data in Research**

#### **Controlled Testing and Simulations:**

Synthetic data allows researchers to conduct controlled experiments and simulations by generating datasets with known properties. As a result, they can rigorously test and validate findings before costly real-world trials such as simulating clinical trials in healthcare research.

#### **Reproducibility and Scalability:**

Synthetic data ensures reproducibility and scalability by providing standardized data representations. By sharing these representations, researchers enable others to reproduce experiments and validate findings. Moreover, synthetic data enables the generation of large datasets, particularly useful in fields with limited real-world data, ensuring robust findings.

#### **Data Sharing and Collaboration:**

Synthetic data facilitates data sharing and collaboration while addressing privacy concerns. Researchers can exchange synthetic datasets without compromising sensitive information, fostering collaboration across institutions, disciplines, and geographies. This interdisciplinary research benefits from synthetic data, as it provides a shared dataset with statistical properties relevant to each discipline and leads to innovative insights and solutions.

#### **Insights from a Recent Podcast:**

Synthetic data has the potential to address privacy concerns and serve as a comprehensive solution for AI data needs, as discussed by Alexy Thomas from EY India in a recent podcast. It overcomes limitations of actual data, enhances AI training and testing, enables faster iterations and deployment of AI systems, and has applications in evaluating market behavior and developing innovative products, benefiting the financial services sector. Therefore, synthetic data offers significant advantages in research. It provides a controlled testing environment, enhances reproducibility and scalability, and enables data sharing and collaboration. Leveraging these advantages unlocks new possibilities and drives meaningful progress in various fields.

### **The potential impact of synthetic data is vast across research fields**

**Healthcare:** Revolutionizing medical research and drug development, synthetic data preserves privacy and enhances precision medicine.

**Social Sciences:** Simulating and analyzing complex social phenomena while protecting confidentiality.

**Environmental Studies:** Generating models to predict climate change impacts and inform policy decisions.

### **Synthetic data encourages interdisciplinary collaboration, driving innovative solutions**

#### **Public Health, Urban Planning, and Policy-making:**

Breakthroughs in these areas can be achieved through collaboration across healthcare, social sciences, environmental studies, and more.

#### **Finance and Cybersecurity:**

Synthetic data aids in risk analysis, algorithm testing, ensuring reliability and robustness.

### **Advancements in synthetic data generation techniques offer new possibilities:**

#### **Addressing Data Scarcity, Privacy Concerns, Bias, and Ethics:**

Synthetic data helps to overcome these challenges.

## Embracing Interdisciplinary Collaboration:

Researchers can unlock new insights, solve challenges, and enhance scientific progress. The future of synthetic data holds immense potential for research and scientific discovery.

## Ethical Considerations and Limitations

When using synthetic data in research, it is important to handle ethical considerations responsibly. Privacy protection is crucial but we need strong techniques to anonymize the data and reduce the risk of unintended identification. Additionally, researchers must address biases in the training data to ensure unbiased results. However, synthetic data may not accurately capture the complexity of real-world data. Therefore, validation is necessary to ensure that it effectively represents real-world scenarios. To verify the performance and reliability of synthetic data, rigorous validation against real data is essential. It is crucial to use synthetic data for legitimate purposes, adheres to ethical guidelines and be transparent about the methods used. Documentation plays a key role in fostering transparency and trust while mitigating risks and addressing limitations.

## Key Considerations

To navigate the complexities of synthetic data and maintain ethical integrity, researchers should address ethical considerations, acknowledge limitations and emphasize responsible use, transparency, and documentation. By doing so, they can leverage the benefits of synthetic data for scientific advancement and innovation.

## The Path Ahead

Researchers should collaborate to explore synthetic data and improve its methods to achieve reliable outcomes. Synthetic data has the potential to drive breakthroughs and shape the future of research in various fields. By embracing this approach, we can expand our knowledge and make meaningful advancements. It lets us embark on a collective journey of exploration, collaboration, and innovation with synthetic data to contribute significantly to research and societal progress.

## Sources

[https://www.techtarget.com/searchcio/definition/synthetic-data#:~:text=Synthetic%20data%20is%20information%20that's,machine%20learning%20\(ML\)%20models.](https://www.techtarget.com/searchcio/definition/synthetic-data#:~:text=Synthetic%20data%20is%20information%20that's,machine%20learning%20(ML)%20models.)

<https://www.k2view.com/what-is-synthetic-data-generation>

<https://research.aimultiple.com/synthetic-data-vs-real-data/>

[https://www.ey.com/en\\_in/podcasts/tech-trends/2023/03/episode-3-synthetic-data-artificial-data-real-solutions](https://www.ey.com/en_in/podcasts/tech-trends/2023/03/episode-3-synthetic-data-artificial-data-real-solutions)

## Wall of Fame



**V.PREETHI - II Prize  
III - CSE(IOT), PEC  
District Level Speech Competition  
Tamilnadu State Minorities  
Kalainar Arangam, Chepak,  
Chennai 19.07.25**



## Faculty Journal Publications and Patents

| Name of the Faculty with designation                                                                                                                       | Name of the Journal / Patent                                                                                              | Title of the Article / Patent                                                                  | Reference No.                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-----------------------------------------------|
| Dr.D.Banumathy<br>Prof.- CSE, PEC<br>V.Maheskumar,<br>E.Elanchezlian,<br>K.Santhanalakshmi,<br>K.Sangeetha,<br>R.Niranjana &<br>N.Karthica<br>AP- CSE, PEC | Patent                                                                                                                    | Method for Optimized Resource Allocation in Distributed Cloud Systems using Genetic Algorithms | 202541060428 A                                |
| Dr.V.Priya<br>Prof.- CSE, PEC<br>K.Sangeetha<br>AP- CSE, PEC                                                                                               | TIJER – International Research Journal                                                                                    | Semantic Pulse: AI-Driven Hospital Record Search via RDF and DOM Integration                   | Volume 12, Issue 6<br>ISSN 2349-9249          |
| Mr.R.Logarasu<br>AP- ECE, PEC                                                                                                                              | International Conference (ICDICI 2025)<br>SCAD College of Engineering & Technology,<br>Tirunelveli<br>09.07.25 - 11.07.25 | Alex Net-based Deep Learning Model for Automated MRI Scan Classification                       | DOI:10.1109/<br>ICDICI66477.2025.<br>11135005 |

## Faculty Achievements and Awards

| Name of the Faculty           | Name of the Programme                                                                                            | Venue and Date                                                               | Name of the Event  | Position/Place       |
|-------------------------------|------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|--------------------|----------------------|
| P.Dhivya<br>AP-Phy, PCE       | 8 <sup>th</sup> International Conference on Recent Innovations in Modern Science and Technology (ICRIMST – 2025) | Sivasubramaniya Nadar College of Engineering, Chennai<br>09.7.25 to 11.07.25 | Paper Presentation | Won Best Paper Award |
| Dr.C.Saravanan<br>AP-Phy, PCE | 8 <sup>th</sup> International Conference on Recent Innovations in Modern Science and Technology (ICRIMST – 2025) | Sivasubramaniya Nadar College of Engineering, Chennai<br>09.7.25 to 11.07.25 | Paper Presentation | Presented Paper      |
| P.Jayanthi<br>AP-Phy, PCE     | 8 <sup>th</sup> International Conference on Recent Innovations in Modern Science and Technology (ICRIMST – 2025) | Sivasubramaniya Nadar College of Engineering, Chennai<br>09.7.25 to 11.07.25 | Paper Presentation | Presented Paper      |

# Alumni Testimonial

## PAAVAI ENGINEERING COLLEGE

**R.BALA GANESH**  
B.E - CSE, 2015 - 2018  
Senior Talent Partner  
Bangalore



My studies at PEC was an enriching and transformative experience. The college's unwavering focus on discipline and innovation encouraged me to push beyond the conventional boundaries of learning. I was motivated to explore emerging technologies which led me to actively participate in numerous coding competitions, hackathons, and technical workshops. These opportunities not only honed my problem-solving skills but also boosted my confidence to work in team and during pressure. The faculty members were incredibly supportive, always available to guide me through complex concepts and projects. Their mentorship played a key role in shaping my analytical thinking and practical knowledge. One of the highlights of my journey was the proactive Placement & Training Cell, which provided continuous career guidance, soft skills training, and interview preparation sessions. Thanks to their dedicated efforts, I was able to secure a position at a leading IT company where I now work as a software developer, constantly applying and expanding the skills, acquired at Paavai. Along with academics, the vibrant campus culture, with its blend of cultural events, technical fests and student clubs, gave all the enrichments and well built lifelong friendships. I am truly proud to be a part of the Paavai alumni community, a network, that continues to inspire and support me in my professional growth.

## PAAVAI COLLEGE OF ENGINEERING



**M.RAGAVAN**  
B.E - EEE, 2017 - 2021  
Quality Engineer  
Bangalore

As I remember my time at Paavai college, it was not just an institution where I pursued a degree, it was a place that nurtured my growth, encouraged me to shatter obstacles, and helped me discover my true potential. The lessons I learned here extended far beyond the classroom. I learned how to be resilient in the phase of challenges, how to adapt to change, and most importantly, how to support and grow with a community. I extend my heartfelt thanks to all my teachers and the entire Paavai family for being a guiding light throughout this unforgettable journey. I completed my Diploma in the department of Mechanical Engineering. Now, I am working as Senior Engineer in Hyundai Motor India Ltd at Sriperumbudur, Chennai.



**K.DURKA**

B.Com, 2021 - 2024

Coder, Tata Consultancy Services(TCS)  
Chennai

I am K.Durka a proud alumna in the Department of Commerce, batch 2021-2024 Pava Arts and Science College for Women. I am currently employed as a coder at TATA Consultancy Services (TCS), Chennai. My time at college was a transformative journey where I had the chance to pursue my interests and passions. The faculty played a pivotal role in my development by offering unwavering support, mentorship, and academic guidance which significantly shaped my personal and professional growth. The Placement training and encouragement provided by both the faculty and the placement cell helped me to get into TCS. My current role at TCS has been a fulfilling experience and I feel well-equipped to face upcoming challenges. The college management ensured that we had access to every necessary resource and opportunity making our path to success smoother. I sincerely thank the entire college team for their immense contribution to my journey. The skills, knowledge, and experiences I gained during my time at the college will always remain a valuable asset in my life.

## PAAVAI POLYTECHNIC COLLEGE



**M.ARAVIN MURUGESAN**

DME, 2009 - 2011

Managing Director,  
Mechotronics Solutions PVT, Ltd, Bangalore

I am deeply grateful for the transformative journey I experienced at Paavai College. Now, I am working as Managing Director, Mechatronics Solutions Private Limited, Bangalore. I did my diploma in the department of Mechanical Engineer. My time here was far more than an academic pursuit. It was a period of personal and professional growth that laid a strong foundation for my future. The Department of Mechanical Engineering provided not only technical knowledge but also instilled in me values of discipline, perseverance, and continuous learning. Paavai College played a pivotal role in shaping my character and preparing me to face real-world challenges with confidence. The support and mentorship from dedicated faculty members, along with the collaborative learning environment, helped me develop the skills required to excel both as an individual and as part of a team. Today, I am proud to be working as a Managing Director, Mechatronics Solutions Private Limited. I owe a significant part of my success to the education and experiences I gained at Paavai. I extend my sincere gratitude to my teachers and the entire Paavai community for their unwavering support and guidance throughout this remarkable journey.

# English Grove

## VOCABULARY BOOSTER

**Alacrity - speed and eagerness**

e.g. She accepted the money with alacrity.

**Benecolent - kind and helpful**

e.g. The benevolent woman donated her car for the taxi driver generously.

**Canfor - the quality of being honest and telling the truth, especially about a difficult or embarrassing subject**

e.g. 'We really don't know what to do about it,' she said with surprising candor.

**Debacle - a complete failure, because of bad planning and organization**

e.g. The collapse of the company was described as the greatest financial debacle in US history.

**Facetious - Treating serious issues with inappropriate humour**

e.g. His facetious joke wasn't well received.

**Gregarious - Fond of company; sociable**

e.g. He's gregarious and loves parties.

**Hinder - To cause delay or obstruction**

e.g. Lack of resources can hinder progress.

**Impeccable - Flawless; perfect**

e.g. Her manners are impeccable.

**Kudos - Praise and honour**

e.g. Kudos to the winners!

**Lethargic - sluggish and inactive**

e.g. After lunch, he felt lethargic.

**Meticulous - Showing great attention to detail**

e.g. She's meticulous in her work.

**Nostalgia - Longing for the past**

e.g. Some people feel nostalgia for their school days.

**Obsolete - Outdated, no longer in use**

e.g. Those gadgets are now obsolete.

**Pragmatic - Realistic and practical**

e.g. He's very pragmatic about money.

**Quintessential - Perfect example of a quality**

e.g. She's the quintessential artist.

**Resilient - able to be happy, successful, etc. against something difficult or bad has happened**

e.g. She's a resilient girl, she won't be unhappy for long.

**Juxtapose - to put things that are not similar next to each other**

e.g. The exhibition juxtaposes Picasso's early drawings with some of his later works.

**Wary - Cautious about potential dangers**

e.g. Be wary of online scams.



## With best compliments from :

Paavai Engineering College ( Autonomous)

Paavai College of Engineering

Pavai College of Technology

Paavai Polytechnic College

Pavai Arts & Science College for Women

Paavai College of Education

Paavai Teacher Training Institute

Paavai College of Pharmacy and Research

Paavai College of Nursing and Research

Paavai Institute of Allied Health Science

Paavai Physiotherapy Science College

Paavai Vidhyashram CBSE School

Paavai Matriculation Higher Sec. School

Paavai Vidhyashram School - Salem Campus

Paavai IAS Academy

Paavai Nrithyalaya



Paavai Medical Centre and Hospital  
(400 Bedded Multi-specialty Corporate Hospital)