

You Choose, We Do It

# St. JOSEPH'S COLLEGE OF ENGINEERING (An Autonomous Institution)

# St. Joseph's Group of Institutions

OMR, Chennai - 119



# **JANUARY 2024 DEPARTMENT OF BIOTECHNOLOGY**

S.No.	Title of the Events and Photographs	Details of the Event
1.	St. Joseph's College Of Engineering  OFFARITHENT OF BIOTECHNOLOGY  DATERIOLEGY  MOCK INTERVIEW FOR III YEAR STUDENTS BY OUR ALUMNI  Aishwaryaa Annapoorani I 2017 - 2021 Senior Medical Writer HCL TECH Elcot Sholinganallur  Priyadharshini M 2017 - 2021 Junior Associate Statistical Data Scientist Pfizer Healthcare India Pvt Ltd Anna Salai, Chennai  Venue: Biotechnology Main Lab  St. Joseph's College of Engineering The Choice of Disciplined Toppers  St. Joseph's College Of Engineering The Choice of St. Joseph's College Of Engineering The Choice of Disciplined Toppers	Mock interview by our Alumni Ms. Aishwarya Annapoorani and Ms.M. Priyadarshini was conducted for the III year students on 31.01.2024.





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https://doi.org/10.1016/j.jddst.2023.105094 7

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Copy of paper published by Dr.M.Chamundeeswari

#### STAFF CONFERENCE PRESENTATION



Dr. M. Chamundeeswari, has participated an oral and technical presentation entitled as "Research Progress Of Nanocellulose-Based Food Packaging" in 9<sup>th</sup> Asia Pacific International Modern Sciences Congress held on January 16-18, 2024 / Baku, Azerbaijan organised by Azerbaijan Cooperation University, Mata Sundri College for Women, University of Delhi & IKSAD Institute

4.

SI. N o.	Photographs Captured During Event	Corresponding remarks in regarding the status of activity execution
1	Of garden, was more. The house Clies, Commented Of Infant Starte & others was province.   Continued Registration of Design	Patent Grant
	When it changes 2000 and 1000	Title of the invention : Device To Predict Cardiovascular Attack  Name Of the Inventors :
	the number and long loops address in this 24-bit in record of the application of with the control of the contr	1. Mr. V. Arun Antony
	et es série de la company de l	Dr. N.B. Mahesh Kumar  3. Dr. Lilly Raamesh
	Name of the state	4. Mrs. Jayalakshmi Appasamy
	<b>Dr. Lilly Raamesh</b> received a design	Patent Application Number: 397144-001
	patent grant	Date of filing of Application: 09/10/2023
		Date of Issue: 08/12/024

# FDP / Workshop Attended by the faculty



S.No. Name of the FDP Name of the staff **Conducted By** Duration /Workshop Latest Trend and 1 Techniques in Software Engineering: An Industry Christ (Deemed to be 20-01-24 to 27-01-Mr. N. Raja

University)

Certificates received by Faculty



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Perspective

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Date: 01.03.2024

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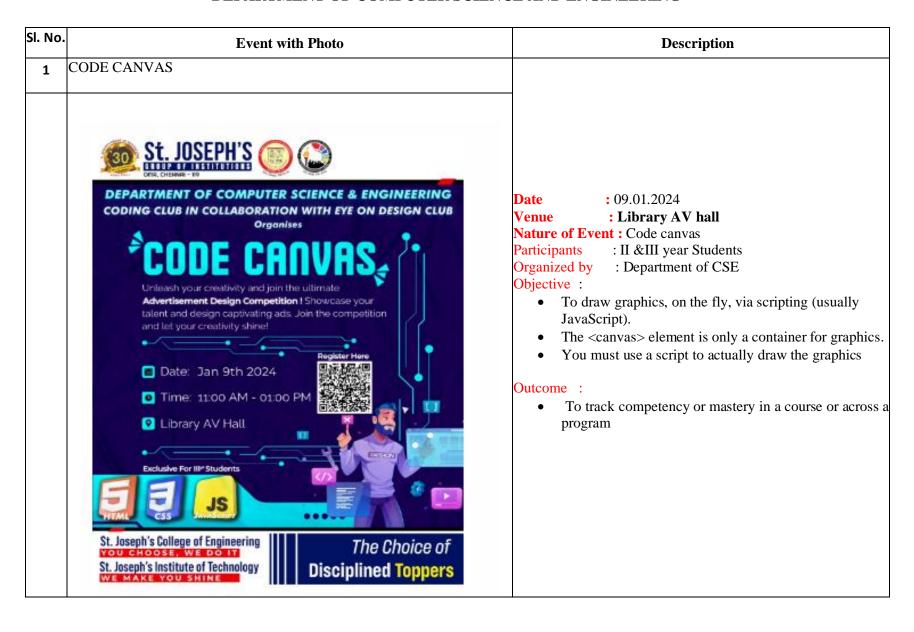
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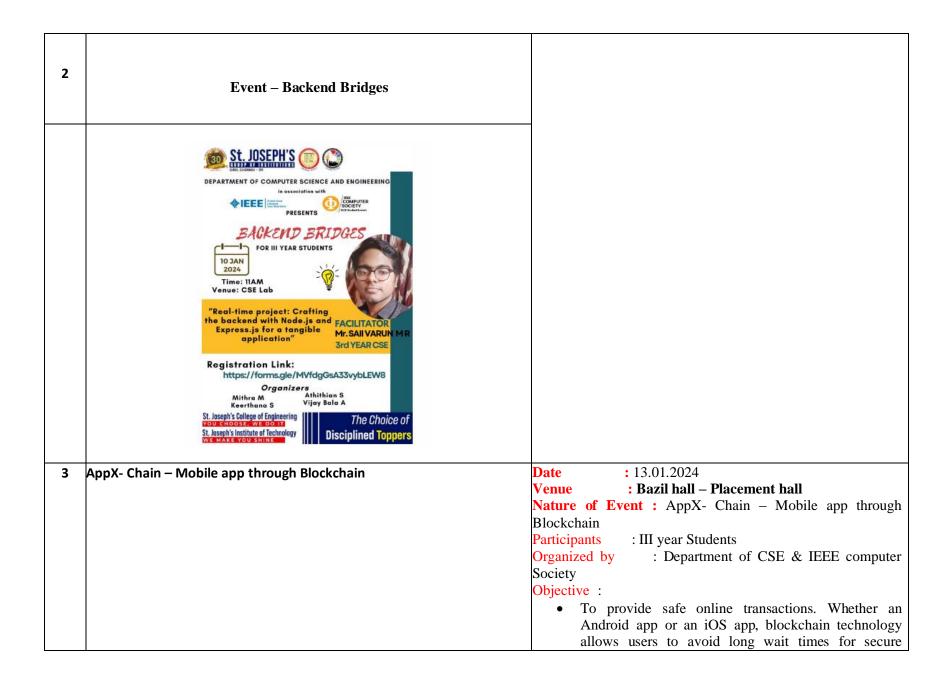
# DEPARTMENT OF CHEMICAL ENGINEERING

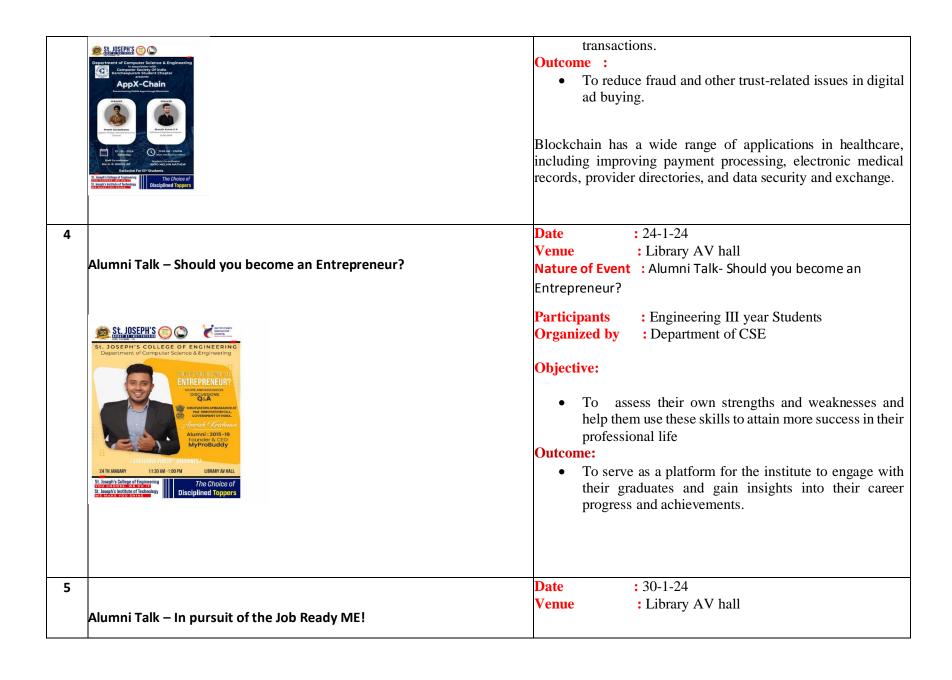
S.No.	Title of the Events and Photographs	Details of the Event	
		Dr.N.Venkatesh, Professor, Department of Chemical	
		Engineering has attended a Five day ATAL - Faculty	
		Development Program on "Plastic Waste Management, key	
		towards carbon neutrality "Organised by Institute of Chemical	
		Technology from <b>15.02.2024</b> – <b>20.01.2024</b> .	
1.	FDP/WORKSHOP/CONFERENCE	Skill Inetia  ATAL  ATAL  ATAL  ALL NDIA COUNCIL FOR TECHNICAL EUCATION  Notes Wands Marg, Yanat Kunj, New Dolin-110 970  ACIT Terining and Learning (ATAL) Academy  Certificate  B is corried to the De Venhamb N. Professor of its people of College of Engineering, his successful participated & completed ACT B caseen, and Learning (ATAL) Academy  Certificate  B is corried to the De Venhamb N. Professor of the School of Foling of Engineering his successful participated & completed ACT B caseen, and Learning (ATAL) Academy  Activation of Certificate  B is corried to the De Venhamb N. Professor of the School of Foling of Engineering his successful participated & completed ACT B caseen, and Learning and Learning Barens, ACT E  Profes Victal Progen  Training and Learning Barens, ACT E  INSTITUTE OF CHEMICAL BELINGLOGY	
		Dr.N.Magesh & Dr.S.Sujatha, Assistant Professor, Department	
		of Chemical Engineering has attended a Ten days Faculty	
		Development Programme on "Advancements in Biotechnology	
		and Chemical Engineering (ABC - 2024)" organised by Vel	
		Tech High Tech Dr.Rangarajan Dr.Sakunthala Engineering	
		College, Avadi from <b>02.01.2024 to 12.01.2024</b>	



# DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING









Nature of Event: Alumni Talk- In pursuit of the Job Ready

ME!

**Participants**: Engineering II year Students

**Organized by**: Department of CSE

# **Objective:**

• To enhancing their employability scope, enhancing their performance, building confidence, and promoting professionalism.

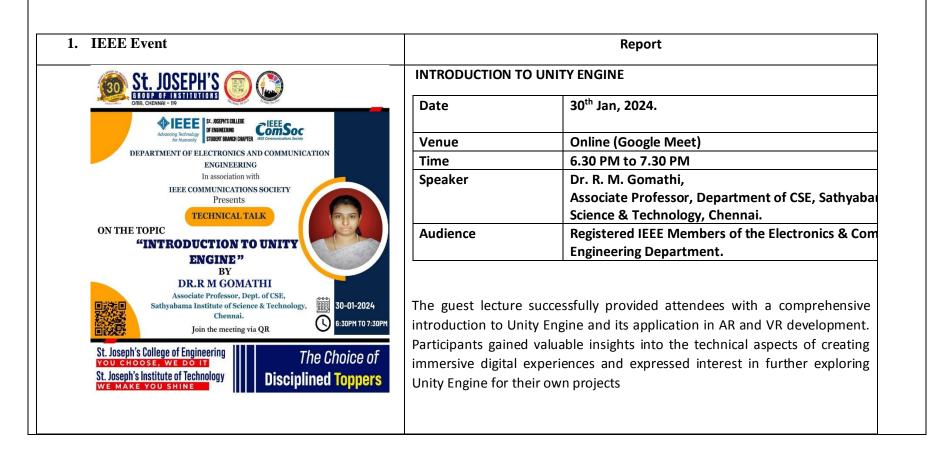
# **Outcome:**

• To serve as a platform for the institute to engage with their graduates and gain insights into their career progress and achievements.

#### DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

# 1. Event conducted

The following events have been conducted during January 2024 at College Level



# DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

SI. No.		Corresponding remarks (Minimum 300 words)	Criterion
	IEEE CALIVITIES  LET'S PLANT A TREE  GROWING A GREENER TOMORROW-3024 PAANTHOT TREES FOR A BETTER WORLD  PIC: EVENT POSTER	The IEEE Power and Energy Society of St. Joseph's College of Engineering organized an awareness event titled "Let's Plant a Tree" - Growing a Greener Tomorrow 2024. The contest ran from January 1, 2024, to January 7, 2024, with the primary goal of encouraging individuals to take responsibility for creating a greener environment. This initiative was launched at the beginning of the new year, and we urged participants to plant saplings and submit their entries through the provided Google Form. Approximately 15 participants enthusiastically embraced the initiative, and we are optimistic about its success. We believe that by setting an example, we can inspire others to take similar actions. We are delighted with the response and will be awarding E-certificates as tokens of appreciation to the participants.	4



PIC: EVENT POSTER

IEEE Spectrum, is the world's largest professional organisation devoted engineering and the applied sciences. It contains peer-reviewed feature articles pertaining to technology and science trends affecting business and society. This spectrum was conducted to enlighten the young minds and some skillful knowledge out of it. The speaker Ms. J. Jasmine spoke on "AIpowered drone learns extreme acrobatics ". The speaker enlightened us with the idea that "Researchers from the Robotics Perception Group at the University of Zurich and ETH Zurich, in collaboration with Intel, have developed a neural network training method that enables an autonomous quadrotor to fly extreme acrobatic maneuvers with only onboard sensing and computation. The quadrotor can perform maneuvers that are challenging even for the best human pilot, without any kind of external camera or motion-tracking system to help it out. The AI training is done in simulation, without the need for an additional simulation-to-realworld transfer step. The simulation environment that the researchers used was Gazebo, slightly modified to better simulate quadrotor physics. The quadrotor was trained to perform three acrobatic maneuvers plus a combo of all of them: Power Loop, Barrel Roll, and Matty Flip." The participants had an

	amazing experience in the meet and enjoyed the entire session.	
IEEE activities  PIC: EVENT PHOTO	The IEEE CSI event, "Backend Bridges," held on 10-01-2024 conducted by St. Joseph's College of Engineering, was a comprehensive initiative aimed at enhancing participants' backend development skills using Node.js and Express.js. This dynamic event seamlessly integrated theoretical knowledge with practical experience through a guided project, led by a seasoned technical expert. Participants gained insights into server-side scripting, routing, middleware, and database integration, solidifying their understanding of backend development. Prioritizing a survey-driven approach, the event tailored content to participants' existing frontend knowledge. Beyond code implementation, it covered deployment and server-side considerations, ensuring a holistic learning experience.	4



PIC: EVENT PHOTO

St. Joseph's College of Engineering, (Electrical & Electronics Engineering) ENSAV CLUB in associated with IEEE SJCE SB organized a technical event "PICOWATT PALOOZA " on 10-JANUARY-2024. This exclusive event started at 1:40PM to 3:00PM with all the members of our club. The event was started with "TAMIL THAI VAZHTHU" and the event started exploring the hidden talent of our Students. This event consists of rounds **ROUND** 1: FINDER TIME, ROUND 2: CHOOSE ME The rules of the event were explained before each round. Participants with higher score were shortlisted for further rounds and finally we declare top three winners. They were honoured with ecertificates for their outstanding contributions during the event. The event continued with the enthusiasm of our students.



IEEE WIE SJCE SB -AG in association with IEEE St. Joseph's College of Engineering student chapter conducted a webinar session" on 11-01-2024 on FEARLESSFEMME" behalf of National Army Day. The topic for the session was "Street survival for girls-Walk without fear" presented by Lt.Col.Rohit Mishra, Founder of Mission fight back, TEDx speaker. Students from the Final year, prefinal year, and Second year of the Department of Electrical and Electronics Engineering participated. Certainly, the session was not only informative but also inspiring, providing the participants with valuable insights and knowledge. His dedication to empowering individuals, particularly girls, shone through every word, leaving a lasting impression on all who attended. Approximately 30+ students took part in this event over Gmeet. The participants were rewarded with E-certificates as a token of appreciation -Memento was awarded to the speaker by the end of the session.





PIC: EVENT POSTER

IEEE Spectrum, is the world's largest professional organisation devoted engineering and the applied sciences. It contains peer-reviewed feature articles pertaining to technology and science trends affecting business and society. This spectrum was conducted to enlighten the young minds and some skillful knowledge out of it. The speaker Ms. J. Jasmine spoke on "AIpowered drone learns extreme acrobatics ". The speaker enlightened us with the idea that Researchers from the Robotics and Perception Group at the University of Zurich and ETH Zurich, in collaboration with Intel, have developed a neural network training method that enables an autonomous quadrotor to fly extreme acrobatic maneuvers with only onboard sensing and computation. The quadrotor can perform maneuvers that are challenging even for the best human pilot, without any kind of external camera or motion-tracking system to help it out. The AI training is done in simulation, without the need for an additional simulation-to-realworld transfer step. The simulation environment that the researchers used was Gazebo, slightly modified to better simulate quadrotor physics. The quadrotor was trained to perform three acrobatic maneuvers plus a combo of all of them: Power Loop, Barrel Roll, and Matty Flip." The participants had an

	amazing experience in the meet and enjoyed the entire session.	
PIC: EVENT PHOTO	On January 13, a comprehensive meeting was held, bringing together the office bearers of IEEE St. Joseph's College of Engineering Student Branch Chapter. The gathering included chairs, vice chairs, secretaries, and joint secretaries from all societies affiliated with the chapter. The meeting aimed to facilitate communication and collaboration among the leadership, fostering a cohesive environment for effective functioning of the various societies within the IEEE student branch	4



PIC: EVENT PHOTO

The IEEE Photonics Society Of St. Joseph's College Of Engineering Conducted 'TechTrove', a technical online mode webinar for 3rd and 4th year EEE students, on January 16, 2024. The event aimed to inspire and motivate students to explore in the field of Pitch My tech and foster collaboration among enthusiasts and featured a keynote address by Ms.Katharina Boguslawski, a Physicist, Pitch Trainer at happy business moves Trier, Germany, highlighting the significance of Pitch My Tech. The event saw the cumulative participation of 15 students over the Gmeet. The session was generally well received by the participants and was very informative. Participants were also allowed to interact with the speaker and get answers to their queries regarding Pitch My tech and IEEE as a whole. E-Certificates were provided to all who participated in the event.

9

# **IEEE activities**



PIC: EVENT POSTER

IEEE Power Electronics Society Madras Chapter PEL 35 (CH10352), in collaboration with IEEE Power Electronics Society SJCE SB (SBC60101C), organized a webinar session "FUTURE FORGE" on January 17, 2024. The topic for the session was "Role of Power Electronics in Structuring the Smart City," presented by Dr. S. Albert Alexander. Students and staff from the final year, prefinal year, and second year of the Department of Electrical and Electronics Engineering and other college students and staff participated. The session aimed to delve into emerging trends, innovations, and challenges in the field of power electronics, offering a platform for knowledge exchange and networking among professionals, researchers, and enthusiasts. Approximately 30+ participants took part in this event on Gmeet. The participants were rewarded with e-certificates as a token of appreciation. A memento was awarded to the speaker by the end of the session.



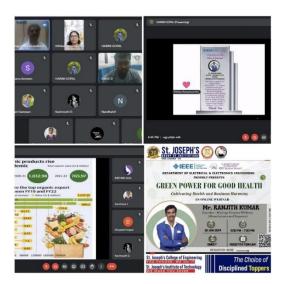
Brief descriptionThe IEEE SJCE SB Maanavar Mandram of St. Joseph's College of Engineering conducted a webinar event "Arinthu kolllungal" related to Tamil literature on 17th January 2024 The event was conducted in online mode. Overall, 25 people submitted their response for the event .the webinar speaker is dhivya Prabha N. and the webinar topic about Pongal background and lead.The student coordinators for this event are Deepika U "Jayavarshini M J , Abinaya Priya R A , Shiva D Sunil Kumar M.

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V.தேவி பிரியா MA, B.Ed பயிறசி ஆசிரியர் பலிறது ஆசிரியர் பலிறது ஆசிரியர் சல் நிறுவனங்கள் - வள்ளலாற் கலை மற்றும் அறிவியல்ல கல்லூரியின் IEEE தமிழ் மன்றும் சொசைட்டி மாணவர் கிளை பிரிவால் ஏற்பாடு செய்யப்பட்ட, சிறப்புமிக்க விரிவுரை நிகழ்ச்சிக்கு மேச்சாளராக இருந்ததற்கு நன்றி.	The IEEE SJCE SB Maanavar Mandram of St. Joseph's College of Engineering conducted a webinar event "Arinthu kolllungal" related to Tamil literature on 19th January 2024. The event was conducted in online mode. Overall, 25 people submitted their response for the event. The webinar speaker was V.Devi Priya and the webinar topic was about Tamil Society and Culture. The student coordinators for this event are Deepika U ,Jayavarshini M J , Abinaya Priya R A , Shiva D Sunil Kumar M.	4
IEEE activities	The IEEE Power and Energy Society of St. Joseph's College of Engineering in association with IEEE R10 PES Student Chapter Committee organized an event titled "IEEE 2024 PES HPSBCP," providing a valuable opportunity for PES student chapters to secure funding, with a maximum grant of \$1000. The event, held on January 21, 2024, was led by Mr. Rishi Kant Thakur, Chair of IEEE R10, who shared insights on seizing funding opportunities within Region 10. During the event, Mr. Thakur comprehensively discussed the funding	4



application process, highlighting essential details to be filled out and outlining the eligibility criteria. His guidance aimed to address any uncertainties among student chapters under Region 10, fostering a better understanding application of the The requirements. proved session instrumental in equipping attendees with the necessary knowledge to pursue and successfully secure funding for their PES initiatives.



IEEE WIE SJCE SB -AG in association with IEEE St. Joseph's College of Engineering student chapter conducted a webinar session" UNLOCKING WELLNESS" on 25-01-2024 . The topic for the session was " **CULTIVATING HEALTH AND BUSINESS** HARMONY" presented by Mr.Ranjinth Kumar, an Entrepreneur, Founder of Murunga promise wellness. Students from the Final year, pre-final year, and Second year of the Department of Electrical and Electronics Engineering participated. Certainly, he discussed the rich nutritional content of Murunga leaves, emphasizing their potential positive impact on various aspects of health, such as immune system support, antioxidant properties, and overall well-being. The detailed view likely covered aspects like vitamins, minerals, and other bioactive compounds present in Murunga leaves contributing to their wellness-promoting effects. Approximately 20+ students took part in this event over Gmeet

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PIC: EVENT

POSTER

The IEEE PELS Society, in collaboration with the IEEE Student Branch Chapter of St. Joseph's College of Engineering, organized "TECHTRIVIA," an online technical quiz event held on 26th January 2024. Around 20 students participated, showcasing their knowledge in various technical domains such as power electronics, energy systems, and control systems. The event comprised multiple rounds, each focusing on specific technical areas, conducted through a userfriendly online platform. Winners were recognized for their outstanding performance, making TECHTRIVIA a successful and engaging initiative in promoting academic excellence and fostering a sense of community within the technical student body.



PIC: EVENT POSTER

On January 28, 2024, the IEEE Power Electronics Society, in partnership with St. Joseph's College of Engineering, orchestrated a highly successful "WORD LADDERS" Mind Puzzle Event from 9:00 AM to 6:00 PM. The event, designed to cultivate intellectual challenge, excitement and attracted enthusiastic participants from diverse locations. Attendees engaged in a day-long exploration of linguistic prowess and problem-solving skills, navigating through intricate word puzzles that tested their vocabulary and analytical thinking. The collaboration between the organizing entities ensured a seamless virtual experience, culminating in the recognition of top performers with prizes and fostering a sense of community within the power electronics enthusiasts. The event's resounding success is attributed to the dedication of participants, organizers, and sponsors, making it a and intellectually enriching memorable experience.



The IEEE Student Branch Chapter of St.Joseph's College of Engineering wrapped up its Nation's Pulse: Civic Duties of Republic India essay competition with 20 enthusiastic participants. Submissions, in English or Tamil, showcased creative reflections on India's civic duties within a concise 1 to 3-page PDF format. Winners received merit certificates, and all participants were acknowledged with e-certificates.

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rounds and finally we declare top two winners. They were honoured with certificates for their outstanding contributions during the event. The event continued with the enthusiasm of our students. The program ended with a photo session.

PIC: EVENT PHOTO

# **Club Activities**



St. Joseph's College of Engineering, (Electrical & Electronics Engineering) CHOPPERS CLUB in associated with IEEE SJCE SB organized a technical event "ELECTRICA EUPHORIA" on 31th JANUARY 2024. This exclusive event started at 1:40PM with all the members of our club. The event was started with full enthusiasm by exploring the hidden talents of the students. This event consists of two round .The rules of the event were explained before each round. Participants with higher score were shortlisted for further rounds and finally we declare top two winners. They were honoured with

PIC: EVENT PHOTO	certificates for their outstanding contributions during the event. The event continued with the enthusiasm of our students. The program ended with a photo session.	
Chenai, TN, India Semmanier Chenai, 60019, TN, India Chenai, TN, India Semmanier Chenai, 60019, TN, India Semmanier Chena	St. Joseph's College of Engineering, (Electrical & Electronics Engineering ELECTRICAL CLUB in association with IEEE SJCE SB organized a technical event "DYNAMICA 2.0 "on 05/01/2024. This exclusive event started at 12:20 PM with all the members of our club. The event was started with "TAMIL THAI VAZHTHU" and the event started exploring the hidden talent of our Students . Abiding the famous quote "Talent hits a target no one else can hit; Genius hits a target no one else can see" the event started exploring the hidden talent of our students through this event. The rules of the event were explained before the event	4

starts. Participants with higher score were shortlisted for further rounds and finally we declare top three winners. They were honoured with Merit certificates for their outstanding contributions during the event. The event continued with the enthusiasm of our students.

Club Activities

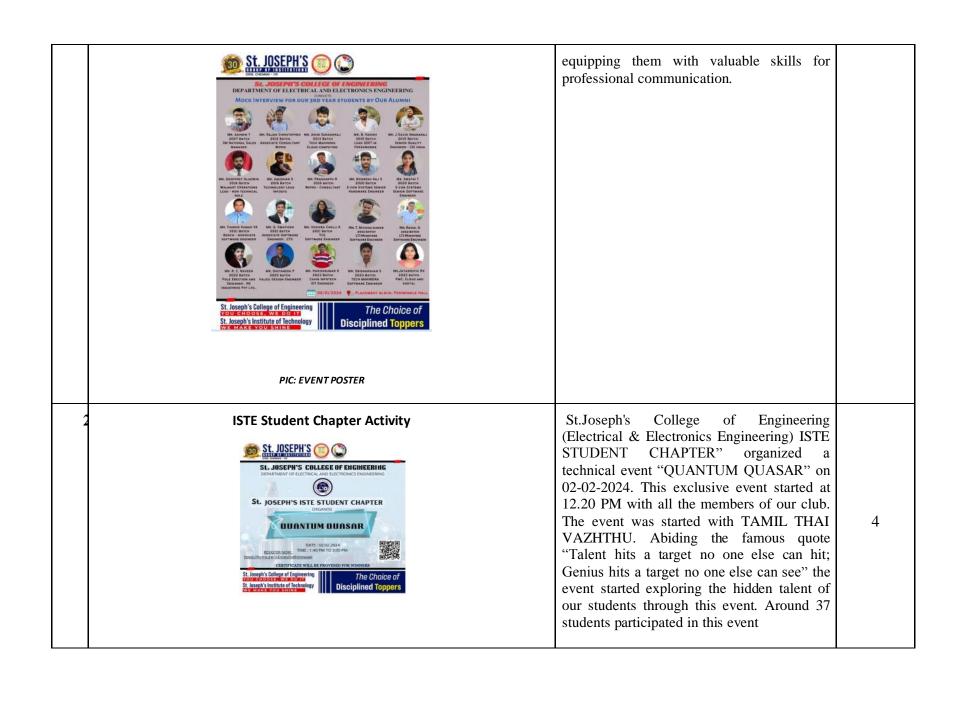


PIC: EVENT PHOTO

The "ROBOTICS CLUB" at St. Joseph's College of Engineering, specializing in Electrical & Electronics Engineering in associated with IEEE SJCE SB hosted a technical event "ELECTROBOTS" on JAN 12, 2024. The event commenced at 1:40pm with all the members of the club and concluded at 3:00 pm with a photo session. ROUND 3: FUNJAM The event's, rules were outlined prior to its commencement. Participants with the highest scores progressed to subsequent rounds and ultimately, we announced the top three

winners. These outstanding contributors were recognized with Merit certificates at the event's conclusion. The program concluded with a photo session. Our department of Electrical **VOCABULARY TEST SERIES** Electronics Engineering, Lingual Clique club has organized word power vocabulary test series for the students. The test series helped the students to improve their communication skills. Test 18 - 5/1/24 Test 19 - 26/1/24 WORD POWER VOCABULARY TEST SERIES- SEA WORD POWER VOCABULARY TEST SERIES- SEASON TEST 18 - HOCK CAT EXAM PARA COMPLETION GRAHMAR AND SENTENCE CORRECTION JOIN US TAKE OUR ONLINE TEST AND ACHIEVE YOUR LEARNING DREAM **LEARNING DREAM** seph's College of Engineering St. Joseph's Callege of Engineering PIC: EVENT POSTER





	PIC: EVENT POSTER		
2	Faculty Development Program	Participated in NPTEL-AICTE FDP titled  1. Dr.V.Chamundeeswari- participated in 5 days International Virtual FDP on "Hybrid Education for Pedagogical Success" from 9th - 13th Jan 2024 Organised by Department of computer Science of Saveetha College of Liberal Arts and Sciences, SIMATS.  2. Mr.T.Sriananda Ganesh participated in 8 days FDP on "ICT Integrated Evolution in Outcome Based Education" from 5th -12th Jan 2024 Organised by Department of Electrical and Electronics of AMET University.	5
2	Faculty awards and recognitions	Dr.M.RameshBabu-Reviewed a paper in IEEE Access on 25.1.2024.	5
2	PLACEMENT DETAILS FOR THE MONTH OF JANUARY 2024	2020-2024 Batch  Total No of students placed = 49 Students  Total No of Offers = 55 Offers	4

	No of students having single offers = 44	
	No of students having Double offers = 4	
	No of students having Triple offers = 1	
	No of students having Quadruple offers = 0	

Day:

### DEPARTMENT OF MBA

FACULTY PAPER PUBLICATION:	Dr. J. Balamurugan has published a paper on "An efficient wastewater collection model for groundwater resource protection in smart cities" in Groundwater for Sustainable Development.  Dr. G. NIRMALA has published a paper on A STUDY ON CAPITAL ASSET PRIICING MODEL WITH REFERENCE TO BSE-500 Rabindra Bharati University Journal of Economics, Vol.: XXVII, No:11, 2023 ISSN: 0975-802X,
	Surenthran David. P has published a paper on INFLUENCE OF DIGITAL TRANSFORMATION ON INVESTMENTS FOR SENIOR CITIZENS: A COMPREHENSIVE STUDY Humanities and Social Science Studies, Vol. 13, Issue 1, No. 6, January – June: 2024; ISSN 2319-829X  Dr. J. Balamurugan Has Published A Paper On An Analysis Of Hrm Based On Government And Private Sector Banks, Mukt Shabd Journal, Volume XII, Issue XI, NOVEMBER/2023, ISSN NO: 2347-3150
FACULTY PATENT PUBLICATION:	Dr.A.Arun has published a patent on The impact of e-Commerce on business performance in a business to business performance.  Dr.S.Subalya has published a patent on HR Analytics: A systematic Examination for HR Procedure.  Dr. J. Balamurugan Has Published a patent on The impact of e-Commerce on business performance in a business to business performance.

### FACULTY FDP / STTP/WORKSHOP **ATENDED:**



This is to certify that Ms. A. Ammupriya , Assistant Professor, Department of Management , St.joseph college of Engineering, Chennai has attended an Online FDP on "Dimensions of Economics Today" from 08-01-2024 to 12-01-2024 organized by P.G. and Research Department of Economics, Jamal Mohamed College (Autonomous), Tiruchirappalli.

A.7. I. Hoja Mohideen
Dr. A. J. Hoja Mohideen
Head of the Department
Mr. A. M. Z. Mohammed Arsath Ali
Organizary Secretary
Principal



Dr Subalya S, Dr.J.Balamurugan and Dr.A.Ammupriya have attended an Online FDP on "Dimensions of Economics Today" from 08-01-2024 to 12-01-2024 organized by P.G. and Research Department of Economics, Jamal Mohamed College (Autonomous), Tiruchirappalli.

### STUDENTS ACHIEVEMENTS:

STUDENTS	EVENTS	PRIZE
	Adzap + Block and	
Reshma devi	Talk	Rs. 1000
Resillia devi	Talk	Ks. 1000
Vishwa S		
Vicky James V	HR -Auction,Silver	
Priyadharshini S	Screen, Think tank	Winners
T TZ		
Lavanya K		
Manoj Kumaran K		
Vishwa S		
Reshma devi	Best Salesmen	Runner

# **DEPARTMENT OF SCIENCE**

Sl.	Events	Remarks				
No.						
4	FDP/Workshop/Conference	Invited Talk:				
		1. Dr. P. Krishnan has delivered an invited talk in "Workshop on Communication skill				
		enhancement" conducted by " Dearaka Doss Goverdhan Doss Vaishnav College-				
		Chennai				
		On 02.01.2024.				
		Attended:				
		1. Dr. A. Uma Devi, Dr. N.R. Rajagopalan attended IPR awareness/training program				
		of "National Intellectual Property Awareness Mission (NIPAM)" at St. Joseph's				
		College of Engineering on 08/01/2024.				
9	Awards/Prize won by students / Staff	Reviewer:				
		Dr. K. Jayamoorthy has acted as reviewer for the following journals:				
		1. Sensors and Actuators B: Chemical				
		2. Journal of Clinical and Diagnostic Pathology				
		3. Current Organic Chemistry				
		4. Chemical Physics Impact				
11	Publications(only published) details	1. Dr. S.M. Prakash published a patent titled "Synthesis And Characterization Of				
		Diphenylmethane-Indole Derivatives With Antioxidant Activity Assisted By				
		Microwave"				
		Publication number 02/2024 dt. 12.01.2024				

# DEPARTMENT OF MECHANICAL ENGINEERING

SI No	Name of the Activity	Remarks
1	St. JOSEPH'S  OF COLUMN TO THE PROPERTY OF THE CHOICE OF ST. JOSEPH'S COLLEGE WE DO IT  St. Joseph's College of Engineering YOU CHOOSE, WE DO IT St. JOSEPh'S Institute of Technology WE MAKE YOU SHINE	➤ A Team of Mechanical Students (25 Nos.) from second, third, final year participated in the SAE m-BAJA-Main Event at Pithampur organized by BAJA SAE India.
2	St. JOSEPH'S  IIV-India Students' Chapter St. Joseph's College of Engineering  Proudly presents Technical talk by Expert  III INDIAN INSTITUTE OF WELDING (I Manus Students)  ADVANCEMENTS  IN THE ARC WELDING POWER SOURCES  Mr. Sritharanandh G Regional Sales Manager Kemppi India  XEMPPI  Bronz by  Department of Mechanical Engineering  Venue: Audio Visual Hall  Department of Mechanical Engineering  The Choice of  Disciplined Toppers	➤ An Expert Talk on 'Advancements in Arc Welding Power Sources' was organized by the IIW-India Student Chapter. Mr.  Srithranandh G, Regional Sales Manager at Kemppi India, was invited to deliver the talk."
3	Paper Published	G.M. Lionus Leo,Ravikumar Jayabal,D. Srinivasan,M. Chrispin

Das, M. Ganesh, Thodda Gavaskar, "Predicting the performance
and emissions of an HCCI-DI engine powered by waste
cooking oil biodiesel with Al <sub>2</sub> O <sub>3</sub> and FeCl <sub>3</sub> nano additives and
gasoline injection – A random forest machine learning
approach",Fuel

# **DEPARTMENT OF INFORMATION TECHNOLOGY**

### DEPARTMENT OF INFORMATION TECHNOLOGY **Photographs Captured During** Corresponding remarks in regarding the status of activity execution Sl. **Event/Screenshot Staff Paper Publication** Aruna Jasmine, J. and Heltin Genitha, C. "Deep Convolutional Neural Networks with Bee Collecting Pollen Algorithm (BCPA)-based Landslide Data Balancing and Spatial Prediction". Journal of Intelligent & Fuzzy Systems, Print ISSN: 1064-1246, Online ISSN: 1875-8967, doi: 10.3233/JIFS-234924, Vol. 46, No. 1, pp. 597-617, 10 January 2024 (Impact factor: 1.737, Indexed in Scopus). Deep convolutional neural networks with Bee Collecting Pollen **Abstract:** Predicting the landslide-prone area is critical for various applications, including emergency response, land planning, and disaster mitigation. There needs to be a thorough landslide inventory in current studies and appropriate sampling uncertainty issues. Landslide risk mapping has expanded Co-author significantly as machine learning techniques have developed. However, one of the primary issues in Landslide Prediction is data imbalance (DI). This is problematic since it is challenging or expensive to C Heltin Genitha generate an accurate inventory map of landslides based on previous data. This study proposes a novel Published a paper in Scopus landslide prediction method using Generative Adversarial Networks (GAN) for generating the synthetic Indexed Journal data, Synthetic Minority Oversampling Technique (SMOTE) for overcoming the data imbalance problem, and Bee Collecting Pollen Algorithm (BCPA) for feature extraction. Combining 184 landslides and ten criteria, including topographic wetness index (TWI), aspect, distance from the road, total curvature, sediment transport index (STI), height, slope, stream, lithology, and slope length, a geographical database was produced. The data was generated using GAN, a Deep Convolutional Neural Network (DCNN) technique to populate the dataset. Divya J, Chandrasekar A, "SIOV-FTFSA-CAOA: a fuzzy trust-based approach for enhancing security and energy efficiency in social internet of vehicles". Wireless Network, Print ISSN:1022-0038, Online ISSN: 1572-8196, doi.org/10.1007/s11276-023-03626-9, 2024. (Impact factor: 3.73, Indexed in Scopus). The Social Internet of Vehicles (SIoV) is an emerging network that interconnects vehicles and generates vast amounts of data concerning social relationships, chauffeurs, commuters, as well as surrounding conditions. However, security is a major concern in SIoV networks, especially during data transmission. In order to solve this problem, we propose a novel approach called SIoV-FTFSA-CAOA, which stands for



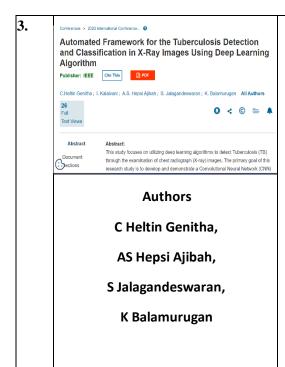
The Social Internet of Wehicles (SloV) is an emerging network that interconnects vehicles and generates vast amounts of data concerning social relationships, chauffeurs, commuters, as well as surrounding conditions. However, security is a major concern in SloV networks, especially during data transmission. In order to solve this problem, we propose a novel approach called SloV-FFFSA-CAOA, which stands for Social Internet of Vehicles — Fuzzy-based Trustworthy Friendship Selection Algorithm—Crossover-

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Published a paper in Scopus Indexed Journal

Social Internet of Vehicles—Fuzzy-based Trustworthy Friendship Selection Algorithm—Crossover-boosted Arithmetic Optimization Algorithm, to enhance security in SloV networks. The proposed method uses fuzzy logic to map input factors to an output trust score, indicating the level of trust between vehicles. The Crossover-boosted Arithmetic Optimization Algorithm is used to identify communities based on modularity measure values that indicate the quality of community structures. The highest trust value selection algorithm is then used to select trustworthy friends in each community based on high trust scores, ensuring secure communication. The Road Aware Geographical Routing protocol is utilized to establish the routing path between vehicles, and the Battery Model-based Energy Computation method is used to estimate the consumption of energy to the established path.



#### **Staff and Student Paper Publication**

C Heltin Genitha, I Kalaivani, AS Hepsi Ajibah, S Jalagandeswaran, K Balamurugan. "Automated Framework for the Tuberculosis Detection and Classification in X-Ray Images Using Deep Learning Algorithm' International Conference on Self Sustainable Artificial Intelligence Systems, ICSSAS 2023, pp. 215-220, doi: 10.1109/ICSSAS57918.2023.10331715, Electronic ISBN:979-8-3503-0085-7, Print ISBN:979-8-3503-0086-4, December 2023(Indexed in Scopus)

Abstract: This study focuses on utilizing deep learning algorithms to detect Tuberculosis (TB) through the examination of chest radiograph (X-ray) images. The primary goal of this research study is to develop and demonstrate a Convolutional Neural Network (CNN) based method specifically designed for the TB detection in chest images. The algorithm developed comprises of three key stages: pre-processing, feature extraction, and classification. During the initial pre-processing stage, the input chest X-ray image undergoes normalization and resizing operations to establish a standardized and consistent fixed size. This step aims to enhance the uniformity and comparability of the images. The CNN technique is utilized to automatically identify desirable characteristics from the X-ray of chest image during the feature extraction step. The chest X-ray image is classified as tuberculosis positive or negative during the classification step using the retrieved features. The findings of this study could enhance the precision and speed of tuberculosis detection utilising chest X-ray imaging. The proposed algorithm has the potential to assist healthcare professionals in the early and accurate detection of TB.



**S. Sumathi, N. Nivetha and J. Princy Jovita,** "Artificially Intelligent Operating System with Sapi5 Voice Recognition Engine," 2023 9th International Conference on Smart Computing and Communications (ICSCC), Kochi, Kerala, India, 2023, pp. 477-481, doi: 10.1109/ICSCC59169.2023.10334967, Electronic ISBN:979-8-3503-1409-0, Print ISBN:979-8-3503-1410-6, 06 December 2023. (Indexed in Scopus)

Abstract: A machines or computer's intelligence is used by an artificial intelligence operating system to manage computer hardware and software and offer common services for the computer, allowing it to tackle difficult issues with ease. AIOS is a humanoid system that performs various activities to satisfy the needs of the user. They can gather the inputs from the user using voice to text conversion and provide the desired output. The system is developed in such a way that it can show you the date & time, conversion of voice into text, can play music according to the user's request, can tell a joke and can answer to the user's questions, can search, and show the results in google, YouTube, Wikipedia and it can also perform the power operations. Artificial Intelligence encompasses a range of fields, including Intelligent Systems, Fuzzy Logic Systems, Natural Language Processing, Expert Systems, and Artificial Neural Networks. Together, these technologies can be harnessed to create an Artificially Intelligent Operating System that simplifies the adoption of new techniques and proves invaluable in our daily lives. This also helps physically challenged people to utilize and gain easier access to resources.

#### **Staff Paper Publication**

R. T S, **A. Tamizhselvi**, H. Patil, V. Mittal, S. Kaliappan and R. Maranan, "Improved Email Spam Detection Using Integrated Approach of BiGRU-A-LSTM Approach," 2023 International Conference on Self Sustainable Artificial Intelligence Systems (ICSSAS), Erode, India, 2023, pp. 1-6, doi: 10.1109/ICSSAS57918.2023.10331890, Electronic ISBN:979-8-3503-0085-7, Print ISBN:979-8-3503-0086-4, 06 December 2023. (Indexed in Scopus)

**Abstract:** In today's world, email is used by nearly everyone. It has been called the most efficient, widely used, and low-cost method of communication currently available. However, the widespread use of email has been hampered by the proliferation of unwanted and potentially fraudulent messages that must be quickly identified and isolated using a spam detection system. Spam identification is crucial for the safety of email users and for avoiding the many harmful applications to which email has been put recently. There is a pressing need for improved spam detection techniques due to the adaptive nature of unsolicited emails that are sent through mailing programmes, which has severely reduced and

sometimes rendered the efficiency of existing spam detection methods. Despite the fact that several algorithms for detecting spam have been presented and tested, the reported accuracy indicates that further research is needed in this area. Preprocessing, feature selection, and model training are all used in the suggested method. Preprocessing makes use of tools like HTML tag removal, stop word removal, Tokenization, and word frequency. Feature selection is performed using TF-IDF. CNN-A-BiLSTM is utilized for model training. The proposed method has superior results to those of LSTM and BiLSTM, two well-established alternatives.

6



**Sample FDP Certificate** 

### FDP/Workshop attended by Faculty

S.No	Title of the topic	Name of the Staff	Conducted By	Date
1.	Hybrid Education for Pedagogical Success	G. Sathyadevi D.Jeya Priya G.Supraja E. Elakkiya M.Nandhini	Saveetha College of Liberal Arts and Sciences, SIMATS	09-01-24 to 13-01-25 (5 days)
2.	Research Methodology	G. Sathyadevi	Yashwantrao Chavan College Ambajogai, Maharashtra	16-01-24 (1 day)

		3.	Emerging Trends in Artificial intelligence and deep learning	E. Elakkiya G. Sathyadevi	Sri Sairam institute of technology	26-12-2023 to 30-12-2023 (5 days)	
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# DEPARTMENT OF CIVIL ENGINEERING

SI. No.	Photographs Captured During Events  (Briefs About the Photographs)	Corresponding remarks (Minimum 300 words) in regarding the status of activity execution stating
1.	Publications (only published) details	<ul> <li>Thenmozhi, S, Published a paper titled Sujatha, A., "Predicting and forecasting building energy performance using RSM and ANN" Asian Journal of Civil Engineering, 2024, 25(1), pp. 159–165, January 2024.</li> </ul>

# DEPARTMENT OF MATHEMATICS AND ENGLISH

Events	nts Remarks										
FDP/Workshop/Confe	FDP/Workshop/Conference										
	S.No	Name of the staff	Title of FDP / Workshop	Organized by	Mode	From	То				
EASCLITE DEPENDIMENT PAGRAM	1	Dr.P.Chellamani	FDP on Building Advanced Data Analytics Applications with Cloud	Next Gen Employability Program	Online	08-01- 2024	12-01- 2024				
րոչույլ	2	Dr. J. Nancy	Drafting project proposals, Exploring funding opportunities and Mastering the Art of journal paper presentation (Workshop)	Saveetha School of Engineering	Physical	20-01- 2024	20-01- 2024				
	with	th applications to NMR s	Prabhu, M. Arulperumjothi, Topo spectroscopies, Journal of Molecu olstruc.2024.137492. (SCIE)								
Publications(only published) details	2. Prakash A & S. Sarayu Priyadharshini & Abirami T & Giriraj Kiradoo & Bairavi B & Mariappan B & Priyadarshini M.C. & P. Jayakumar & Saravana Selvakumar. R & S. Janneker Lawrence Daniel, 2024. "An Examination of the Diverse Interpretations of the Epic through the Paradigm of Queer Theory and the Contradiction of the Self and Society," World Journal of English Language, Sciedu Press, vol. 14(1), pages 484-484, January. (SCOPUS)										
			T, Ilyas Khan, Suresh K; More es 1 January 2024; 14 (1): 015233								

# DEPARTMENT OF ELECTRONICS AND INSTRUMENTATION ENGINEERING

SI.	Title	Detail					
No.							
I	Patent	S.No	Faculty Name	Published date	Title	Type (patent Or copyrights)	Proof
		1.	Dr.R.Sivakumar	26/01/2024	Design of Robotic Marker for Welding	Patent	CONTROL CONTRO
		2.	R.Kotteeswaran	26/01/2024	Firm Ware Vulnerability Spoofing Attacks Persistent Control Detection Using Machine Learning Supervi	Patent	THE STATE OF THE S