DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Report on

STRIDES

E-JIVE 2K24



About the Event:

E-JIVE, a technical event organized by the Department of Electronics and Communication Engineering (ECE), showcased exceptional innovation and creativity. The event attracted participants from various institutions, fostering a collaborative environment for learning and networking.

The event's success can be attributed to the meticulous planning and dedication of the organizing team, who ensured that attendees gained valuable insights and experiences throughout the program.

This time we organizing the five technical events under EJIVE 2K24 organized by Electronics and Communication Department in association IETE local chapter Kakinada on 01/03/2024. Along with these events one alumni meet through online Program is conducted and event name called corporate dialogue.

The five events are:

- 1. SLIDE TECH
- 2. ROBO SPARK
- 3. INNOVEX
- 4. TECHART
- **5. CIRCUIT QUEST**



This time every engineering branch creates one innovative project model. The model will display on the stride day 1st and 2nd March 2024.

This year strides 2K24 creates Smart Pragati Hackathon (SPH) event for all Pragati student for two days. This event is based on coding for solving given problem statement. Total 4 teams participated from department of ECE in SPH.

Participations Count for All Events:

Name of the Event	Within College	Other State Colleges	IIT, NIT, IIIT Colleges	Total
SLIDE TECH	120	20	1	141
ROBO SPARK	121	10	2	133
INNOVEX	72	9	1	82
CIRCUIT QUEST	395	12	2	409
TECH ART	255	25	5	285

EVENT-1 SLIDE TECH



Description: It's an exciting event where participants create PowerPoint Presentation on various technical topics. The topic you choose should be completely application-oriented.

Your topic must be among the branches.

- 1. Biomedical instrumental
- 2. VLSI
- 3. Radar Technology
- 4. IOT
- 5. Embedded Systems

Evaluation can be based on criteria like Content, delivery, visual appeal, Time Management, and Overall Effectiveness.

Guidelines:

- Select a diverse topic and prepare a PowerPoint Presentation.
- PPT should range from 12-15 slides including Title and Thank you page.
- Presentation time should be about 5 mins.
- Abstract should range from 80 100 words.

Details of Judge:

Dr. G Suryanarayana Assoc. Professor Department of ECE, VR Siddarada Engineering College. Vijayawada

Prize Money:

1st Prize: 2000/-2nd Prize: 1000/-

Student Coordinators:

N Alekya: +91949379655

Y Pavan Kumar: +91 761947951





Faculty Coordinators:

Dr. Subodh Panda, Assoc. Prof. Mrs. D V V Lakhmi., Assist. Prof. Mr. Y Vijay Kumar, Assist. Prof.





Photos of Slide Tech event conducted in online and offline.

Registered: 190 Accepted: 34

Slide Tech Winners

SECOND PRIZE



Student Name: Ch Sai Chandra Mouli

Roll no:23A35A4326

College: Pragati Engineering College



Student Name: Ch Sai Chandra Mouli

Roll no:23A35A4326

College: Pragati Engineering College

EVENT-2 ROBOSPARK



Event Name: Robospark

Description: It is a thrilling event where participants showcase their Robotic Engineering skills in a fast-paced Competition. Participants should prepare a "Linefollower Robot" using Arduino. Robots will navigate through challenging tracks, demonstrating speed, agility, and precision.

Guidelines:

- Robot should be an "Arduino based Line-follower Robot".
- The robot should complete the Race Track.
- The given track is black color and robot should follow the that line.
- For every participant have given three chances.
- Evaluation is based on time and efficiency of the robot.

Judgement

Based on robot speed and efficiency Prizes will be decided.

Student Coordinators:

K Komali Venkateswari: +919885692204

K Mahesh: +91 9010851189

Registered:190

Prize Money:

1st Prize: 2500/-2nd Prize: 1500/-

Faculty Coordinators:

Dr. V Radhika, Assoc. Prof Ms. Rubia Tasneem, Assist. Prof.

Accepted: 23



Photos of ROBOSPARK event conducted in EG-10.

ROBOSPARK WINNERS

FIRST PRIZE

NAME PRINCETTY IN STREET OF THE PRINCETTY IN STR

Student Name (s): D M LAKSHMI SARADA (22A31A04Q7) V JAYA SRI (22A31A04S7) And TEAM Pragati Engineering College



Student Name (s):G NEERAJ SURYA (22A31A0438), I SHASHANK KUMAR (22A31A0425), G PRASANTHI (22A31A0408) Pragati Engineering College

EVENT-3 CIRCUIT QUEST



Event Name: **CIRCUIT QUEST**

Description: CIRCUIT QUEST is technical quiz on electronic circuits can cover a wide range of topics related to the theory, design, analysis, and application of electronic circuits.

1st ROUND:

20 MCQs are given and they should be answered. Duration: 20 Minutes

The contest should be held by google forms or by using an online hosting platform The Questions should be given in MCQs format

There are 20 Questions: (10 – Easy, 05 – Medium and 05 – Hard)

SYLLABUS: Basic Circuit Components, Basic Formulas, Networks (Electrical), C Language (Basic), Digital Electronics.

Based on the Registrations the top 40% members are allowed for the Second Round. The Round Should be Conducted only in Online Mode, we(Coordinators) will share the Instructions before the Event starts, so everyone should get ready.

2nd ROUND

The second Round is the most captivating and challenging Round, that showcases your circuit debugging Skills and enhances your Interest on circuits and Electronics MODE: It should be Held in Both Online & Offline

- Those who attend College should be attend offline mode
- Those who are unable to attend college/ from different streams can attend the contest via your Laptops in Online Mode. 2nd Round consists of 2 Questions
- 1(Analog Circuit) An Output Waveform is given and a jumbled circuit (circuit with components misplaced) will be given, You have to Fix the Circuit and should reproduce the Waveform Given to You.
- Time Limit is 15 Minutes.
- SYLLABUS: Amplifiers, Rectifiers, Oscillators.

Prize Money: 1st Prize: 2000/- 2nd Prize: 1000/-

Registered:429 Round -1 Participation:111

Selected for Round-2: 20

Student Coordinators:

J Nithin: +918179560468 K Priyanka: +91 8374402479



Faculty Coordinators:

Mr. B Kalyan Chakravarthy, Assist. Prof. Mr. P Krishna Chaitanya, Assist. Prof.







Photos of Circuit Quest event conducted in Computer Lab-1.

CIRCUIT QUEST WINNERS

FIRST DRIZE



Student Name: Battina Paramesh Roll no: 23A31A04S4

Pragati Engineering College



Student Name S Bhavana Roll no:23A31A04P8 Pragati Engineering College

EVENT-4 INNOVEX



Event Name: INNOVEX

Description: Innovex is a project expo. A platform where ingenious minds converge to showcase their cutting-edge projects, unveiling a spectrum of innovation and creativity. Project expo transcends the realms of imagination, featuring a diverse array of projects spanning the Electronics and Communication sectors.

Your Projects should only be from the domains

- Embedded Systems and IOT
- Embedded Systems using AI
- VLSI

- Signal Processing and Image Processing
- MATLAB

Guidelines:

- 1. The team should contain Maximum 3 members
- 2. At the time of the Presentation be ready with Project Kit, A PPT with 5-10 Slides
- 3. The abstract should not exceed more than 150 words.

The project should strictly belong to specified domains

Details of Judge:

Dr. K V Rajesh Kumar Assoc. Professor AI Research Centre, School of Business, Woxsen University, Hyderabad.

Student Coordinators:

T Sravanthi Terissa, +91 8106527723 K Ram Nishnath: +91 8309783365

Prize Money:

1st Prize: 2000/-2nd Prize: 1000/-

Faculty Coordinators:

Mr. M Ravi Kumar, Assist. Prof. Mrs. G Viranya, Assist. Prof.

Registered:82

Accepted: 17









Photos of INNOVEX (Project Expo) event conducted in online and offline conducted in EG-4 and EG-5.

INNOVEX WINNERS

FIRST PRIZE



R Chaitanya (22A31A04i5), D Hari Saran (22A31A04G4) P Nanda Sri Gopal (22A31A04i0) Pragati Engineering College



J Greeshma (22U41A0418) M Roshini (22U41A0433) J Mounica V S devi (22U41A0420) B Jaya Sri (22U41A0405) DADI Institute of Engineering and Technology

Event-5 <u>Tech Art</u>



Event Name: Tech Art

Description: Tech Art is a contest where artists create artwork that is inspired by technology. The artwork should resonate based on its creativity, innovation, and how well it incorporates technology.

- A drawing of sculptures made from electronic components or recycled technology materials.
- A realistic photography sketch that explores the relationship between humans and technology, capturing moments of technological advancement or the impact of technology on society.
- A sketch of installations that use light, sound, and interactive elements to explore technological themes. A hypothetical sketch inspired by automobiles or gadgets.

This is a social media contest. The winner is decided through the number of likes. Draw the art that falls under the above guidelines. Submit your art to us. We post it on our Social Media page. The Art with more likes and good explanation of art will be the winner.

Details of Judge:

Dr. P Bharath Kumar Assistant Professor Madanapalle Institute of Technology & Science Andhra Pradesh

Student Coordinators:

J Rama Tulasi, +91 9908952509 D Leela Sai: +91 8688551501

Prize Money:

1st Prize: 2000/-2nd Prize: 1000/-

Faculty Coordinators:

Mr. P Ravi Shankar, Assist. Prof. Mrs. N S Dattatreyachari, Assist. Prof.

Registered:285

Participated: 110







Photos of TECH ART event conducted in online and offline in EG-11.

TECH ART WINNERS

FIRST PRIZE



Student Name: Illa Vinay Sekhar Roll no: 21A31A04U4 Pragati Engineering College



Student Name: Dasari Aadarsh Roll no: 23A35A0315 Pragati Engineering College

TOP 12 Tech Arts Drawings



Name: I Vinay Sekhar Branch: ECE Pragati Engineering College



Name: D Aadarsh Branch: MECH Pragati Engineering College



Name: M Pravallika Branch: CSE-AI Pragati Engineering College



Name: K Mohan Sai Branch: CSE-AI Pragati Engineering College



Name: V Koumudi Branch: AIML Pragati Engineering College



Name: Ch Pavani Branch: ECE Pragati Engineering College



Name: B Deepthi Branch: B.Com ARTS College RJY



Name: M . Surya Nikhil Branch: AIML Pragati Engineering College



Name: J. Omkareshakhil Branch: ECE Pragati Engineering College



Name: Amrutha Branch: Civil Pragati Engineering College



Name:R Chaitanya Deepthi Branch: B.Com ARTS College RJY



Name: N SriManikanta Branch: ECE Pragati Engineering College

Corporate Dialogue Event

ALUMNI DETAILS FOR CORPORATE DIALOGUE EVENT



Name: Ramesh Adapa (2004-08 Batch)

Designation: SAP EHS Team Lead for EMEA & APAC

Organization: CPG TREMCO

City: Germany

Online Link: To join the meeting on Google Meet, click this

link: https://meet.google.com/dgk-cdmm-sur

Or open Meet and enter this code: dgk-cdmm-sur

This event conducted in online and all students gathered at EG-3 at 2:30PM. Mr. V Prasanth I/C HOD of ECE welcoming the guest and started conversation about his job and life in Germany. After that Varshini of III ECE student given brief introduction about his distinguished alumni and starts the program.

He started his conversation with college life in Pragati. That what he did for getting software job. What struggles he faced for getting job? How much time he spends? Discussed about Present technologies for upcoming software engineers. He always open to give suggestions to his juniors about their jobs in software side. He concludes the session with questions asked by III ECE students. Total 60 students presented in this program. Vote of thanks given Vashini of Our III ECE student.





Photos of Corporate Dialogue Event conducted in EG -3.

Innovative Model Project

Title: Hand Gesture-Based Wireless Wheelchair Control for Patients.

Description: This project aims to develop a wheelchair control system that utilizes hand gestures for patients who have limited mobility or physical disabilities. The system enables patients to control the wheelchair's movement wirelessly through intuitive hand gestures, providing them with increased independence and ease of navigation.

Explanation: The gesture sensor detects hand movements and translates them into electrical signals, which are then processed by the Arduino Nano. The Arduino Nano interprets these signals and generates corresponding commands to control the wheelchair's movement.

Through wireless communication, the Arduino Nano sends these commands to the motor driver, which in turn regulates the speed and direction of the wheelchair's motors. This allows the patient to navigate the wheelchair using simple hand gestures, such as swiping left, right, forward, or backward.

The use of hand gestures as a control interface offers patients a more intuitive and natural way to operate the wheelchair, eliminating the need for physical buttons or joysticks. Additionally, the wireless nature of the system enhances convenience and freedom of movement for the user.

Overall, this hand gesture-based wireless wheelchair control system provides patients with greater autonomy and mobility, improving their quality of life and facilitating independent living.



Photos of Innovative Model Project of title Hand Gesture -Based Wireless Wheelchair Control for Patients.

Smart Pragati Hackathon (SPH) Participants list

The following four teams participated in SPH program from ECE Department

Team-1

S.No	Item	Details		
1	Problem Statement	SPH – 24 -01		
	Code			
2	Project Title	Suggest an AI – based solution to enable ease of grievance lodging		
		& Tracking for citizens across multiple department		
3	Technologies to be used	NLP, Chatbots & Virtual Assistants, Machine Learning, API, Cloud		
		- Computing		
4	Team Composition	Total 6 Members		
		Team Leader		
	Roll Number	22A31A04Q4	22A31A04R9	22A31A04S8
	Name	B. Renuka	N. Sai Susmitha	V.U.V. Sowmya
	Branch	ECE-E	ECE-E	ECE-E
	Mobile number	9966471751		
	Roll Number	22A31A04P8	22A31A04Q5	22A31A04Q6
	Name	V. Sri Vishnu Priya	B. Durga Jahnavi	Ch. Satya Sahithi
	Branch	ECE-E	ECE-E	Lakshmi
				ECE-E
5	Faculty Guide Name	Dr. Subodh Panda		
	Designation	Professor		
	Department	ECE		
	Mobile Number	9337994245		

Team-2

S.No	Item	Details		
1	Problem Statement	SPH – 24 -02		
	Code			
2	Project Title	Smart and Effective Real – time Management of Street Parking		
3	Technologies to be used	Through IOT and AI		
4	Team Composition	Total 6 Members		
	Roll Number Name Branch Mobile number Roll Number Name	Team Leader 22A31A04R5 M Satvika Anjali ECE 6301075006 22A31A04T5 G Kalyan	22A31A04P7 B Aksha Nikitha ECE 22A31A04V2 P Rehanth	22A31A04R2 K Prasanna Lakshmi ECE 22A31A04V8 V S S Sai Aashritha
	Branch	ECE	ECE	ECE
5	Faculty Guide Name	Dr. Subodh Panda		
	Designation	Professor		
	Department	ECE		
	Mobile Number	9337994245		

Team-3

S.No	Item	Details			
1	Problem Statement	SPH – 24 -06			
	Code				
2	Project Title	Using existing CCTV network for crowd management, Crime			
		Prevention and Work monitoring			
3	Technologies to be used	Using AIML	Using AIML		
4	Team Composition	Total 6 Members			
		Team Leader			
	Roll Number	22A31A04Q0	22A31A04P9	22A31A04S6	
	Name	B Veera Jala Sanjana	Y Chinmaye	T Sri Prathibha	
	Branch	ECE	ECE	ECE	
	Mobile number	7842501780			
	Roll Number	22A31A04T0	22A31A04V7	22A31A04V0	
	Name	V Harsha Vardhan	N Shriyans	J G Nageshwar Rao	
	Branch	ECE	ECE	ECE	
5	Faculty Guide Name	Dr. Subodh Panda			
	Designation	Professor			
	Department	ECE			
	Mobile Number	9337994245			

Team-4

S.No	Item	Details		
1	Problem Statement	SPH – 24 - 06		
	Code			
2	Project Title	Using existing CCTV network for crowd management, Crime		
		Prevention and Work monitoring using AIML		
3	Technologies to be used	Through AIML		
4	Team Composition	Total 6 Members		
		Team Leader		
	Roll Number	22A31A04J2	22A31A04M0	22A31A04K7
	Name	A M Manogna	G Voormika	L Bala Bharathi
	Branch	ECE	ECE	ECE
	Mobile number	9736779999		
	Roll Number	22A31A04K9	22A31A04K4	22A31A04L7
	Name	N Saritha	J Bala Nagavalli	U Sravani Jyothi
	Branch	ECE	ECE	ECE
5	Faculty Guide Name	Dr. Subodh Panda		
	Designation	Professor		
	Department	ECE		
	Mobile Number	9337994245		

Other coordinators List for E-JIVE 2K24

S. No.	Name of the Team	Faculty Coordinators	Student Coordinators
1	Invitation Committee	Dr. Sharon Rose Victor J Mr. Ch Venkateswarlu	G Bhanuja K Harshitha R Nandini
2	Website/Publicity Committee	Mr. Boda T S S Srihari Krishna Gopal Mrs. Subhasri T	B Raghu Ram Ch Sudha Mounika G Satya Siva Sai K Komali Venkateswari
3	Press	Mr. P Krishna Chaitanya	K Komali Venkateswari
4	Budget	Mrs. Gaviramma L Mrs. V V Lakshmi Dadala	Sai Satya Bhumika Devi M G G S Chowdary
5	Discipline Committee	Mrs. B Vasantha Lakshmi Mr. K V S Akhil Mr. G S Siva Kumar Mrs. M Geetha	V Divya Teja K Umamaheswari D Adithya D Abhishek
6	Decoration	Mrs. P Ramya Krishna Mr. M Brahmaraju Mrs. S Jyothi	Ch Aasritha Kavya P Sriya P Vaishnavi
7	Documentation	Mr. T Sekhar	Md Kareemulla Paul Magnus K Suraj



E-JIVE main Coordinators

Student Coordinators:

Faculty Coordinators:

M.S.S Bhumika Devi, III ECE-D Mrs. L Gaviramma, Assist. Prof. G.G. Sai Chowdary, III ECE-B

Mr. T Sekhar, Assist. Prof.

Photos of E-jive 2K24























News Paper Clips of Strides- E-jive 2K24





కార్యక్రమాన్ని ప్రారంభిస్తున్న ముఖ్య అతిథులు

ప్రగతి కళాశాలలో స్ట్రైడ్స్ 2024

[పజాశక్తి-గందేపల్లి

మండలం డ్రగతి ఇంజనీరింగ్ కళాశాలలో శు క్రవారం స్టెడ్స్ –2024 నిర్వహించారు. జెఎస్టేటియుకె నుంచి డాక్టర్ ఎంహెచ్ఎం కృష్ణ డ్రసాద్ ముఖ్య అతిథిగా పాల్గొన్నారు. స్టెడ్స్ –2024 సావనీర్ను ఆయన ఆవిష్కరించారు. ఈ సందర్భంగా కళాశాల చైర్మన్ డాక్టర్ పి.కృష్ణారావు, ముఖ్య అతిథి ఎంహెచ్ఎం కృష్ణ డ్రసాద్ మాట్లాడారు. ఇంజినీరింగ్ విద్యలో విద్యార్థుల సాంకేతిక వైపుణ్యాన్ని డ్రదర్శించడానికి ఇటువంటి సాంకేతిక సదస్సులు ఎంతగానో ఉపయోగపడతాయన్నారు. ఈ కార్యక్రమంలో ఎంవి.హరనాథబాబు, ఎం.సతీష్, జి.నరేష్, వైస్ స్టిన్సివల్, వివిధ విభాగాధిపతులు పాల్గొన్నారు.

Report Prepared by Mr. T Sekhar, Assist. Prof.

M S S Bhumika Devi, III ECE-D K Suraj, III ECE-E Paul Magnus, III ECE-E