



SRI KRISHNA
COLLEGE OF ENGINEERING AND TECHNOLOGY
AN AUTONOMOUS INSTITUTION, ACCREDITED BY NAAC 'A' GRADE



VOLUME 4
ISSUE 4

ECHO

MAGAZINE OF

MECHATRONICS

ENGINEERING DEPARTMENT

" IF YOU ARE TOO BUSY TO READ, YOU ARE TOO BUSY. "

- RICHARD FOSTER



Editorial

I deem it my joy to pen down my thoughts for this issue of ECHO. Recently I came across an Indian startup's astounding technology to pull water out of thin air, which could solve the world's growing water scarcity problem. Uravu Labs now offers a low-cost modular unit for atmospheric water harvesting, powered fully by renewable energy producing no wastewater. Uravu's technique involves the usage of desiccants, that absorb moisture content from air and then releases water when heated. The company aims to reach around 1 million L per day in the next five years which is equivalent to saving more than 2.5 million L of groundwater and more than 15-20 tonnes of carbon-di-oxide (Source: IEEE Spectrum, April 2023).

It's a pleasure to bring to you the latest updates of the Department, technical news and a glimpse of our faculty and students' accomplishments and artistic skills through yet another edition of ECHO. I place on records my sincere appreciation to the faculty and student coordinators of ECHO.

Have a pleasant time of reading!

Dr. M. Lydia
Professor & Head



Faculty Editors:

Dr. K. Ananthi, Assistant Professor
Mr. S. Madhankumar, Assistant Professor

Student Editors:

2019-23 Batch

C. Bero
S. Gedendhar
P. Kishore
S. Vishal

2020-24 Batch

K. V. Deepak
S. Sooraj
A. Dheeraj

2021-25 Batch

S. Mohit
J. Abdul Wahid
R. Dhivya Dharshini
R. Mohan
G. Sree Karthika



SYNOPSIS

- ✿ **DEPARTMENT EVENTS**
- ✿ **ACHIEVEMENTS**
- ✿ **STUDENTS TESTIMONIAL**
- ✿ **RESEARCH & DEVELOPMENT**
- ✿ **EXPLORE THE TECH**
- ✿ **A STORY WITHOUT LETTERS**
- ✿ **THOUGHT MANIACS**
- ✿ **THINK! DO! TREAT!**

“Every man who knows how to read has it in his power to magnify himself, to multiply the ways in which he exists, to make his life full, significant, and interesting.”

– Aldous Huxley

PROJECT EXPO

SRI KRISHNA
COLLEGE OF ENGINEERING AND TECHNOLOGY
AN AUTONOMOUS INSTITUTION (ACCREDITED BY MAC WITH 'A' GRADE)
Kovilambur, Coimbatore-641009.

Department of Mechatronics Engineering

IEEE Robotics & Automation Society
INSTITUTION'S INNOVATION FORUM

PROJECT EXPO

1
Rs 2000

2
Rs 1500

3
Rs 1000

MARCH 31 2023
TIME:10:00 AM | VENUE: MCT BLOCK

Coordinators:
Dr.R.Gopinathan
Ms.U.Priyadarshini

Contact us:
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+91 9715110338



Department organized an **"In house Project Expo 23"**. Final year student teams displayed their innovative project ideas which serve as the solution for the challenges faced by the society.

Jury Member: **Mr. R. Bharath Balaji**, Founder and Proprietor, DJ Power Solutions, Coimbatore.

"Engineering job is a great scientific adventure"

WORKSHOP



Department has organized a **Two days' Workshop and Hands on Training on UAVs** from 10.03.23 to 11.03.23.

DAY 1: Resource person was **Mr. M. Yuvaraj**, Proprietor & CEO, Sky rider Aero solutions, Chennai.

Takeaways:

- Drone Registration
- Types of Drones
- Drone Component Specifications
- Drone Terminologies
- Hands-on Training for Drone Frame assembly

Two days' Workshop and Hands on Training on UAVs

DAY 2:

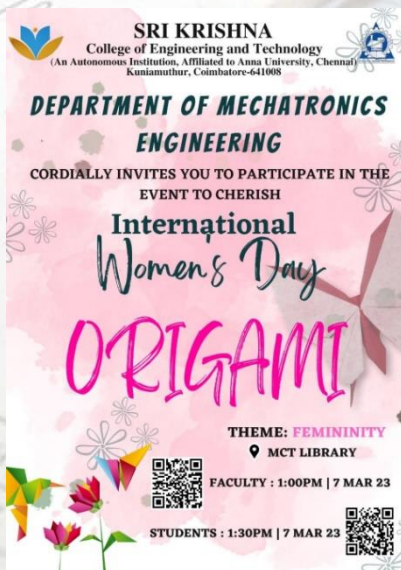
Resource person: **Mr. S. Samraj**, Chief Technical Officer, Skyrider Aero solutions, Chennai.

Takeaways:

- Flight controller connections
- Transmitter and receiver calibration
- Drone Calibration
- UAV outdoor flying demonstration
- Error Rectification
- Drone Piloting



WOMEN'S DAY - ORIGAMI



As a part of the **Women's Day celebration** Department conducted an **origami event** for SKCET stars on 7.3.2023. Faculty and girl students participated in this event more enthusiastically.

"Twist, turn and fold herself to make a beautiful world around her like origami"

BoS MEETING



The Department conducted 15th Board of Studies (BoS) meeting on 13.05.2023 in the Conference Hall for the students admitted under the regulation 2022. The meeting was convened by **Dr. M. Lydia**, Professor and Head of the Department along with the external experts **Dr. K. Linga Durai**, Dean, Anna University Regional campus Madurai, **Dr. Santhakumar Mohan**, Associate Professor Department of Mechanical Engineering IIT Palakkad, **Dr. R. Ramakrishnan**, Associate Professor, Department of Design and Automation VIT- Vellore, Industrial expert member **Mr. Raghul Manogaran**, Senior Tech Lead, Mercedes Benz, Research and Development, Bangalore and the faculty members of MCT. The alumni member **Mr. Muthiah**, Computation Engineer (Automotive), Akka Technologies, Germany joined the meet online. The members deliberated with their vast experience and technical knowledge to fine-tune the syllabi in order to improve our students' skills and make them industry ready.

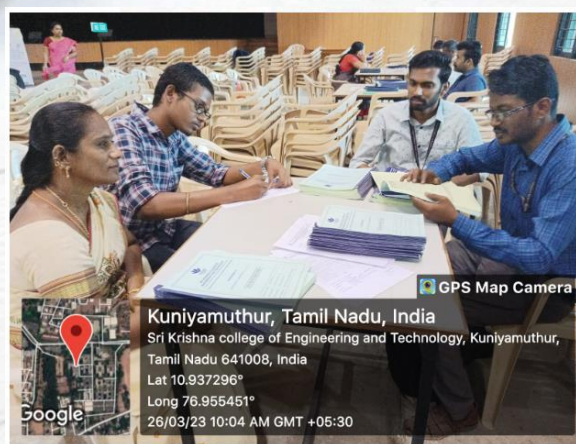


WELCOME NOTE



Dr. M. Lydia, HoD addressed the students of **I year** in the beginning of the even semester on 29.03.23. She emphasized the need to maintain discipline in and around the campus, academic performance, and placement training etc. She motivated the students to participate in National and International conferences, workshops, Hackathon and in-house activities.

ACADEMIC REVIEW MEETING



As a part of **Parent-Teacher interaction**, an **Academic Review Meeting** was organized for the II and III years on 26.03.23 in the Sri Krishna Hall. Parents of II and III year students attended the meeting and interacted with the Tutors and subject handling faculty members. The following points are discussed during the meeting,

- Student Performance in Continuous Internal Assessment and End Sem Examinations.
 - Student's participation in curricular and co-curricular activities.
 - Student's involvement in placement training.
 - Student's involvement in undergoing internship in reputed companies.
- **Academic toppers** were appreciated by **Principal Madam** and were honored with a merit certificate.

ALUMNI INTERACTION

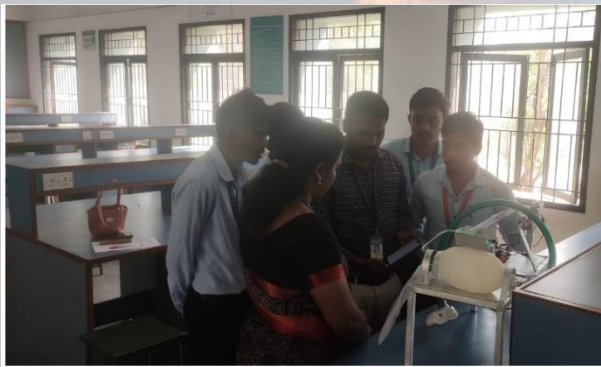
Mr. Sabarikannan, student of 2017-21 batch currently pursuing Master of Science in "**Industrial Management and Innovation**" in Uppsala University, Sweden, visited our department and addressed our students on 23.02.23.

Points of Discussion:

- Higher Education opportunities in abroad
- Selection of PG courses
- Abroad job opportunities



PROJECT REVIEW



The review meetings of **Industrial Project** for final year students were conducted. The students presented their work progress to the review panel. A team of panel members inspected the working model of the end product. Suggestions for the improvement and development of their work were given.

ASSOCIATION VALEDICTORY & GUEST LECTURE



Department Organized **Association Valedictory** and **IIC Guest Lecture** on "**Electric Vehicle Drivetrain Architecture and Design Considerations**" on 25.4.2023 in BS-03.

Resource Person: **Mr. Aswin Palanisami**, Founder, Vinuruk Technologies, Coimbatore.

Session Takeaways:

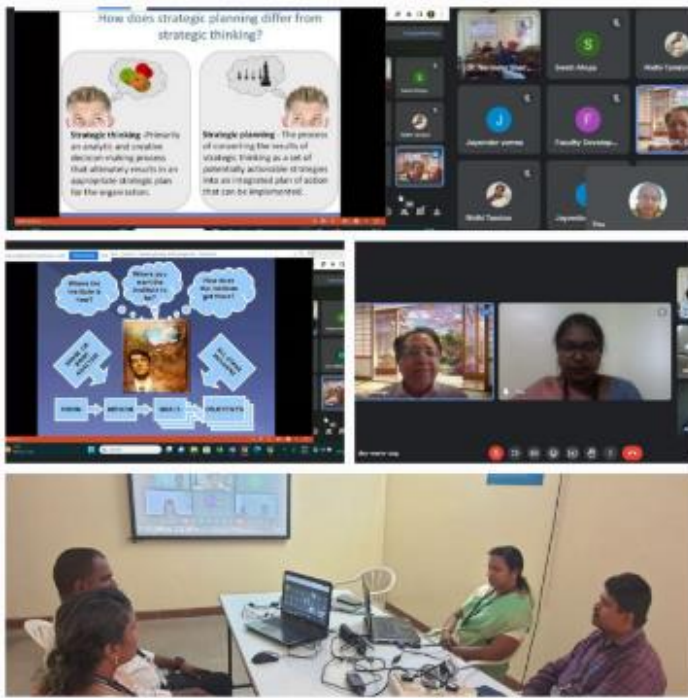
- Electric vehicle architecture
- EV motors and their selection
- Motor drive architecture
- Motor drive selection for EV

PROJECT REVIEW



The reviews of **Mini Project** for **third year** students was conducted. The students presented their work progress to the review panel. Suggestions for improvement and further development were given to the students.

SHORT TERM COURSE



The department as Remote center of **NITTTR Chandigarh** organizes a **Short Term Course (STC)** on **“Strategic Planning and Management”** from 24.04.2023 to 28.04.2023. The STC drew enthusiastic participation from the faculty members.

Coordinators:

1. Dr. D. Pritima, Professor
2. Dr. G. Veerappan, Associate Professor

Day 1 (Session 1) - Strategic Planning and Management

Resource Person: Dr. SK Dhameja, Professor & Course Coordinator, EDIC Department, NITTTR, Chandigarh.

Session Highlights:

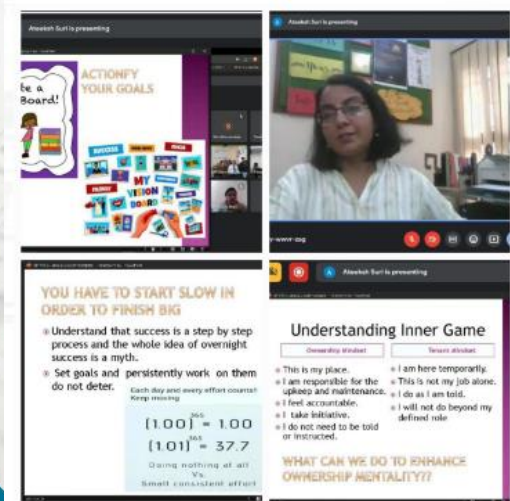
- Characteristics & Need for Strategic planning.
- Scheduling & Stages in the Strategic planning.

Day 1 (Session 2) - Success Mindset for Leaders

Resource Person: Dr. Shilpa Suri, Consultant Psychologist, Planet Psychology, Chandigarh.

Session Highlights:

- Understanding Inner game.
- How to withstand the quiet moments?
- Importance of Vision board.





Day 2 - 5C Steps in Strategic Planning Process

Resource Person: Dr. SK Dhameja, Professor & Course Coordinator, EDIC Department, NITTTR, Chandigarh.

Session Highlights:

- Crafting strategic Vision statement.
- Creating a Mission statement.
- Construct Strategic GOALS.



Day 3 (Session 1) - Performance Appraisal

Resource Person: Dr. Shri Hitesh Kumar Gulati, Change and Organization Development, Diversity Ace Business Consulting, ZirakPur

Session Highlights:

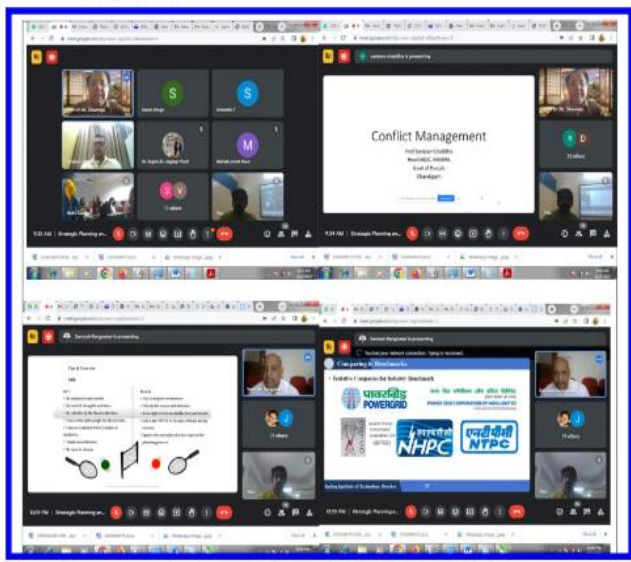
- 360-degree Feedback
- Assessment Centre Method.
- Management by Objective.

Day 3 (Session 2) - Critical Thinking and Problem Solving

Resource Person: Ms. Anuradha Chawla, Performance Coach, Founder and CEO, Bbetter HR Solutions, Chandigarh

Session Highlights:

- Higher order Thinking.
- Hypothesis Testing.
- Generalization and forming a conclusion.

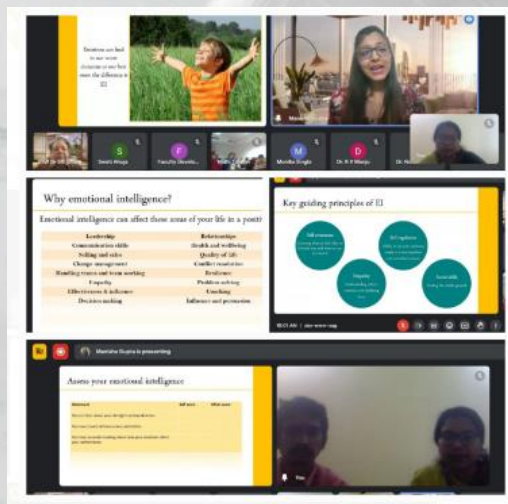


Day 4 (Session 1) - Conflict Management

Resource Person: Dr. Sanjeev Chaddha, Professor & Head, Management Development Centre, Mahatma Gandhi State Institute of Public Administration Punjab, Chandigarh.

Day 4 (Session 2) - SWOT Analysis including a Case study of Transmission Organization

Resource Person: Dr. S. Rangnekar, Professor, Department of Management Studies, IIT Roorkee

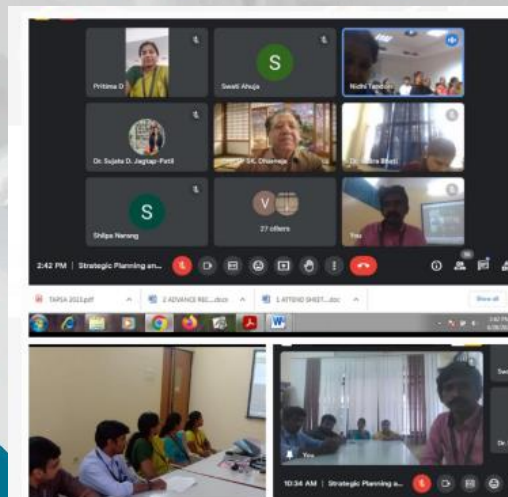


Day 5 - Emotional Intelligence

Resource Person: Ms. Manisha Gupta, EI Expert, Corporate Trainer, Bengaluru.

Session Highlights:

- Understanding Emotions.
- Need of EI.
- Key guiding principles of EI.
- Steps to increase EI quotient.



Feedback and Valediction:

- A total of 33 faculty members from our institution participated in the STC.
- Effective sessions with both Academic & Industrial experts.
- Constructive feedback given by our faculties.

SOLAR ELECTRIC VEHICLE CHAMPIONSHIP (SEVC)



Mentor: Mr.T.Vignesh,
Assistant Professor

Team **ASTRA** comprising of 32 MCT students enthusiastically participated and won the following prizes in the National Level Event - **SEVC** 2023 held at Hindusthan College of Engineering, Coimbatore from 29.03.2023 to 02.04.2023.

- 1st Runner-up Prize in SEVC with the cash prize of Rs. 25000
- Endurance Winner with Rs 5000
- Shutterbug winner with Rs. 3000
- Rush in Dusk Winner (Night ride) with Rs 3000
- Hovering & Drag Winner with Rs 3000
- Manoeuvrability Winner Rs 3000
- Dynamic round Champion in SEV
- Best Driver Award

ELECTRIC KART



Team **Brainiacs** Racing (Electric Kart) comprising of 31 students participated in the **National level 10 GoKart Design Challenge (GKDC)** in Kari Motors Sports Coimbatore, from 10th to 13th April 2023 and has received the following Awards.

- First Runner up – Rs.20000/-
- Winner of Endurance - EV Category – Rs.12000/-
- Best Driver

Mentors: Mr. T. Vignesh and
Dr. R. Gopinathan

E-BIKE



E- BIKE Team **THE CENTAURS**, a student team from the Department have won

- **Best Innovation Award** with a Cash Prize of Rs 10000,
- **Best Durability Award** with a Cash Prize of Rs 10000, and
- **Future Award** with a Cash Prize of Rs 5000, in **SIEP Electric Bike Challenge 2023 Season 3.0**- Powered by ISIE INDIA and Hero Electric held at Galgotias University, Greater Noida (Uttar Pradesh) from 14th to 18th April 2023.

Mentor: Mr. M. Vigneshwaran

PAPER PRESENTATION

Mr. K. Amritbalaji, Ms. G. Harinisri and **Mr. P. Chandru**, II-year students have won the **BEST PAPER AWARD** with a cash prize of Rs.3000 in **ELZIA 2K23** conducted at Hindustan College of Engineering and Technology, Coimbatore.



Mr. Adith, Mr. Baranisundar, Mr. Benjamin and **Mr. Bharanidharan** II year students have won the **FIRST PRIZE** in the event "**Innovation Presentation**" in **Kurukshetra'23** conducted by College of Engineering, Guindy, Chennai.



DEADLIFT



Mr. G. Deepak kumar, student of II year has secured **6th place** in the state level "**Deadlift Championship**" conducted by the Indian Fitness Federation.

STARTUP ARENA



Mr. K. Amritbalaji, **Ms. G. Harinisri** and **Mr. P. Chandru**, II-year students have won the **FIRST PLACE** in **UZHUVISAI** with cash prize worth of **Rs. 15,000** in **Magnima Startup Arena Pragyan'23** conducted at National Institute of Technology, Trichy.

SMARTATHON



Mr. Nithish Anand, **Mr. Cibidharan** and **Mr. Cheran**, II-year students have received **third prize** in **SMARTATHON'23** organized by Department of Computer Science Engineering in association with IIC.

IEEE YESIST



Mr. K. Amritbalaji, Ms. G. Harinisri and Mr. P. Chandru, II-year students have won **Second place** under **MAKERS FAIR CATEGORY** in the Prelims Round of **IEEE YESIST12-2023**, an International Talent Forum for innovative minds to showcase their ideas and bring solutions to real time problems at Sri Sairam Engineering College, Chennai.

INTERNSHIP



Mr. P.T. Shoeb Ali, student of IV year has successfully completed his **internship training** in **"Vortech Trading and Solution"**, Jeddah, Saudi Arabia for 30 days during the period 26th February 2023 – 26th March 2023.

NPTEL



Dr. D. Pritima, Professor has successfully completed and awarded with **Silver** certificate for 4 weeks online **NPTEL** course entitled **"Inspection and Quality Control in Manufacturing"**.

HACKATHON



Mr. Cheran Ravi, II-year Enthusiastic technocrat has won cash reward of **Rs.1 Lakh** in the **Hack_a Nest Hackathon** an exciting event of tech & innovation in Blockchain.

Theme: Blockchain, web 3.0 development using volare blockchain.



G. Brundhavani
2018-22 Batch
Accenture

It was a great experience being a student of SKCET. It has always been a great place to learn, explore and uplift ourselves. The college has provided us with a platform to build our careers by enhancing our skills and by enriching our knowledge. I got all the support and guidance from Faculty members and Placement Officers. The placement cell has provided us with placement training and numerous learning platforms like the Skill Rack portal, Cognizant digital nurture, etc. The events I participated in helped me to grow my confidence level. I would like to especially thank the placement cell for guiding me and providing me with a good platform for my career, and helping me secure my Placement in Accenture solutions and some other companies as well. Thanks to our SKCET management for your support and guidance.

KEY ALUMNI - ENTREPRENEURS

Name of the Alumni	Batch	Name of the Industry
Mr. Gowtham Siddharth	2010-14	Linga Technologies
Mr. Rathish Chidhambaram	2007-11	D Cube Studio
Mr. Jai Suriya	2015-19	Sun Machineries
Mr. Manurraj	2015-19	Varthagam International
Mr. Tamiliniyan	2005-09	Frigate Projects
Mrs. V. Jaiprabha	2015-19	Magnificent Engineering
Mr. Srinath	2017-21	Atomelt
Mr. Sridhar and Mr. Rohit	2016-20	Tuskar Customs
Mr. V. Ashik Raja	2014-18	Bharani Engineering Industries
Mr. Ram Kumar	2002-06	Maxbyte Technologies
Mr. Saktheeswaran	2018-22	Easwara Agro and Engg Tech
Mr. Akshay Kumar	2015-19	VKA Industries
Mr. H. Yuvaraj	2014-18	Global Best Foundries Pvt Ltd

JOURNAL PUBLICATION

Original Paper | [Published: 10 March 2023](#)

Investigations on Silicon Carbide Reinforced High Entropy Alloy (CoCrNiMnFe) matrix Composites Produced by Powder Metallurgy Process

[D. Pritima](#), [G. Veerappan](#), [M. Ravichandran](#)  & [S. Rajamuneeswaran](#)

[Silicon](#) (2023) | [Cite this article](#)

43 Accesses | [Metrics](#)

Dr. D. Pritima, Professor and **Dr. G. Veerappan** Associate Professor have successfully published a paper entitled **“Investigations on silicon Carbide Reinforced High Entropy Alloy (CoCrNiMnFe) matrix Composites Produced by Powder Metallurgy Process”** in Springer Journal. This is a Scopus indexed publication.







Journal of Alloys and Compounds

Volume 958, 5 October 2023, 170500



Effects of ZnO addition on the microstructure/corrosion, wear and mechanical properties of sintered Mg-Al matrix composites

[S. Jayasathyakawin](#)^a, [M. Ravichandran](#)^{a,b}  , [Sikiru Oluwarotimi Ismail](#)^c  , [G. Veerappan](#)^d

Dr. G. Veerappan, Associate Professor has successfully published a paper entitled **“Effects of ZnO addition on the microstructure/corrosion, wear and mechanical properties of sintered Mg- Al matrix composites”** in the Journal of Alloys and Compounds, Elsevier Publication, indexed in Web of Science and Annexure I, with impact factor of 6.371.

Bard

GOOGLE BARD: A Glimpse into a Misinformed Future

Generative AIs have become increasingly popular, with ChatGPT and Microsoft Bing leading the charge. Google has also jumped on the bandwagon with the release of Bard, but so far, it seems to be an inferior product compared to its competitors. Bard struggles with basic questions, uses questionable sources, and appears to be a half-baked product.

However, it's worth noting that these growing pains are not unique to Bard. Bing also experienced similar issues, and Bard has only just been released. Additionally, Google has not positioned Bard as a search engine like Microsoft has with Bing. Still, if Bard were good enough to be a search engine, Google would likely be advertising it as one.

Bard is not a search engine, according to Google. Instead, it's "a complement to Search" designed to help generate emails, write notes, and do other creative things. However, Bard is connected to the internet, and users can ask it questions that require an internet search. If Bard were designed solely for creativity, Google could make it more like ChatGPT, which can only answer questions on topics it's been trained on. Bard's attempts to source answers from the internet have led to errors, such as sourcing a Hacker News comment to answer a question about Bard's shutdown.

Bard's struggles with accuracy and authenticity are concerning, especially considering the pervasiveness of misinformation and disinformation. AI is not an all-knowing being that can comprehend the entire internet and simplify it for users. Bard has already been accused of plagiarizing Tom's Hardware, and Microsoft has faced similar issues with Bing. An AI that spreads misinformation contributes to the problem, and it's nearly impossible to ensure that an AI only provides factual information.

We're at a crossroads with AI. It's becoming more powerful every day, and language models like Bard are growing in popularity. However, unpoliced and unverified content from AI programs can lead to misinformation and disinformation. Facebook is already a platform for conspiracy theories, and AI tools with Google's or Microsoft's names on them will likely contribute to those theories. For now, the best advice is to re-verify all information provided by AI tools. As AI continues to advance, combating misinformation will be an ongoing challenge.

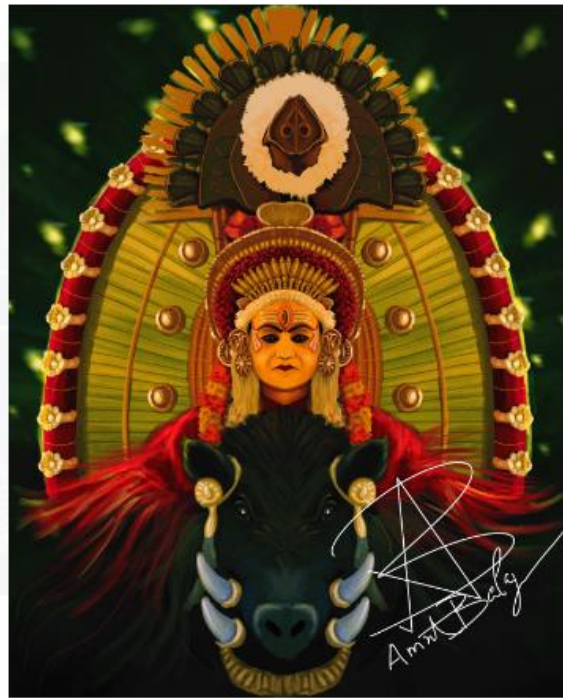
- T. Mohana Kumar
(2021-25 Batch)



- **K. Amrit Balaji**
(2021-25 Batch)



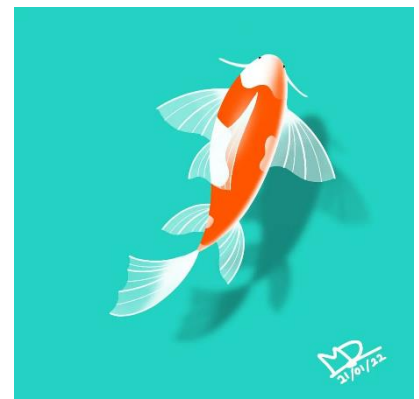
- **S. P. Sharmietha**
(2021-25 Batch)



- **K. Amrit Balaji**
(2021-25 Batch)



- **M. Dhanasekaran**
(2021-25 Batch)



RIDDLES

1. What month of the year has 28 days?
2. What is always in front of you but can't be seen?
3. There's a one-story house in which everything is yellow. Yellow walls, yellow doors, yellow furniture. What color are the stairs?
4. What can you break, even if you never pick it up or touch it?
5. A man who was outside in the rain without an umbrella or hat didn't get a single hair on his head wet. Why?
6. What can you keep after giving to someone?
7. You walk into a room that contains a match, a kerosene lamp, a candle and a fireplace. What would you light first?
8. What can't talk but will reply when spoken to?
9. The more of this there is, the less you see. What is it?
10. David's parents have three sons: Snap, Crackle, and what's the name of the third son?
11. I follow you all the time and copy your every move, but you can't touch me or catch me. What am I?
12. What can you hold in your left hand but not in your right?
13. What is black when it's clean and white when it's dirty?
14. What gets bigger when more is taken away?
15. I'm light as a feather, yet the strongest person can't hold me for five minutes. What am I?

- Mr. S. Panneerselvam
Assistant Professor

Answers: 1. All of them; 2. The future; 3. There aren't any-it's a one-story house; 4. A promise; 5. He was bald; 6. Your word; 7. The match; 8. An echo; 9. Darkness; 10. David; 11. Your shadow; 12. Your right elbow; 13. A chalkboard; 14. A hole and 15. Your breath.

The love of the leaves,
May be shedded by the trees,
But the leaves never freeze,
They are carried by the breeze,
Far away to the Greece,
To make them forget it in ease,
But the leaves never leaves,
Instead, it once again greens,
To confess the world, what it means,
To be like the trees and leaves!!! ❤️

- Elango

Couldnt utter a single word,
As your eyes locked my world.
Your breath holds my heart
And never makes me to start ,
All that I've prepared to make you hear,
Just vanishes the second you come near,
May be I'm not that much expressive,
But i never failed to be impressive.
Truly, I loved you more than my soul,
That, I do even let you go with whole... 💕

- Elango

Once, not even missing your days second,
You receited me all that had happened
Now, I even never know where you are
Time made us to move very far
Couldnt accept that moments change this fast,
Where I'm still holding on to that eternal past...

- Elango

Real love doesnt really exist,
Its a kinda fantasy filled gist,
That arises in any milieus midst,
And fades even in light mist... 🌫️

- Elango

- C. Elango
(2020-24 Batch)

CANDID SHOTS



- Mr. P. Praveen Kumar
(2019-23 Batch)

2019-2023 Batch



*The Best
Way to
predict the
future is to
create it*



*All the best
for your
future*