

Department of CSE








CS Mail

News Letter

Volume 13: Issue II: August, 2024



News Headlines

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Dear Readers,

It is with great pleasure that we bring you Volume 13, Issue II of our department newsletter “**CS MAIL**”. The current newsletter highlights the activities of the department, achievements of faculty and students during the past six months. It also features workshop organized and attended, paper publication details and other social activity undertaken from CS Department. Your valuable comments and suggestions are appreciated.

We wish all the readers an enjoyable reading.

VISION OF THE DEPARTMENT

- ✚ To develop highly talented individuals in Computer Science and Engineering to deal with real world challenges in industry, education, research and society.

MISSION OF THE DEPARTMENT

- ✚ To inculcate professional behavior, Strong ethical values, innovative research capabilities and leadership abilities in the young minds & to provide a teaching environment that emphasizes depth, originality and critical thinking.
- ✚ Motivate students to put their thoughts and ideas adoptable by industry or to pursue higher studies leading to research.

PROGRAM EDUCATIONAL OBJECTIVES (PEO'S)

- ✚ Empower students with a strong basis in the mathematical, scientific and engineering fundamentals to solve computational problems and to prepare them for employment, higher learning and R&D.
- ✚ Exposure to emerging technologies and work in teams on interdisciplinary projects with effective communication skills and leadership qualities.

- ✚ Gain technical knowledge, skills and awareness of current technologies of computer science engineering and to develop an ability to design and provide novel engineering solutions for software/hardware problems through entrepreneurial skills.
- ✚ Ability to function ethically and responsibly in a rapidly changing environment by applying innovative ideas in the latest technology, to become effective professionals in Computer Science to bear a life-long career in related areas.

PROGRAM SPECIFIC OUTCOMES (PSO'S)

- ✚ Ability to apply skills in the field of algorithms, database design, web design, cloud computing and data analytics.
- ✚ Apply knowledge in the field of computer networks for building network and internet based applications.



Message From Principal

ATMECE has emerged as a prominent institute offering quality education. All round continuous changes in infrastructure and academics standard have helped us to build a brand name. It gives me immense pleasure to introduce the Volume 13, Issue II of the half yearly newsletter “CS MAIL” of Computer Science Department. I am pleased to know that the newsletter will showcase the activities and credentials of CS&E department. I hope this will become a platform for students and staff to exhibit their talents in science and technology. On behalf of management, I appreciate the newsletter committee for their efforts in bringing out this edition.

I wish the editorial all success!!!



Regards,

Dr L Basavaraj,
Principal, ATMECE



Dr. Putte Gowda D
Professor & Head

Message From Chief Editor

Dr. Puttegowda D HoD, CS&E Department of Computer Science & Engineering commits to work towards developing dedicated professional with a rich blend of competent, technical, managerial and social skills to contribute nation building. I am happy to inform that our department newsletter “CS MAIL-volume 13 Issue II” is being released in the month of Aug 2024. The newsletter encourage departments technical activities and also motivate students to bring out their innovative ideas , hidden talents and also provide a common platform to share their knowledge, in turn gain technical knowledge.

I wish all the readers an enjoyable reading!!!

EDITORIAL TEAM

Chairman

Dr L Basavaraj Prinicpal,
ATMECE

Chief Editor

Dr Puttegowda D.,
HOD, CS&E

Editor

Mrs.Ashwini P.,
Assistant Professor, CS&E

Student Coordinators

Rajendra A,
Suchithra.

Department Activities

Seminar on “Study Abroad”

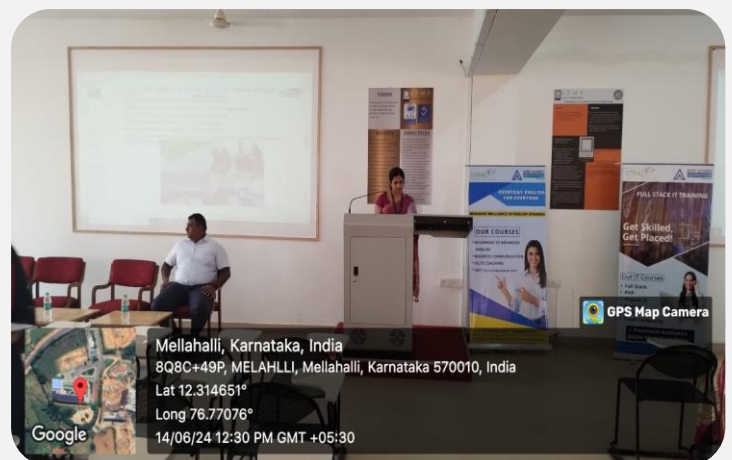
The Department of Computer Science and Engineering has organized a seminar on “Study Abroad” for pre final year students to create awareness on pursuing higher studies on **12th June 2024** at 401 Seminar Hall. The talk focused on enhancement of skills for better employability & Career Development. The speaker **Mr Srinidhi G**, Strategic Alliance Manager, gave importance of pursuing higher education at abroad. He emphasized on new perspectives, learn how to navigate different cultures, work with diverse peers, and communicate in other languages, Study abroad career opportunities etc, Students actively participated in the event and obtained in depth knowledge on career opportunities at abroad .



Speaker addressing the students

Technical Talk on “Full stack Development”

The Department of Computer Science and Engineering has organized a technical talk for 6th semester students on **14th June 2024** at 401 Seminar Hall. The technical talk focused on skills that enable students to understand current market requirements and demands of full stack development. The talk covered with importance, roles of full stack developer, job purpose, future of full stack development and many more. The Speaker **Mr Ajay Sreenivas**, CEO of Green Field Training Academy (GTRAC) provided complete information with respect to Full stack development for the students.



Technical Talk on “New Age career in Digital Era with Emerging GENAI Trends”

The Department of Computer Science and Engineering has organized a technical talk for 6th and 4th semester students on **21st June 2024** at 401 Seminar Hall. The technical talk focused on skills that enables students to increase their job prospects and chances of success. The talk focused on new age skills demanded by industry so that they have higher chances of excelling in their placements. The talk provided a roadmap to a promising career in the technologically advanced new age. The speaker for this technical talk is **Mr Debjit Chowdhry**, MBA in Marketing and finance.



Workshop on Full Stack Development for Industry”

The two-day workshop on “Full Stack Development for Industry” was organized for the 6th semester CSE-Students by the Department of Computer Science & Engineering, ATMECE, Mysuru, held on 28th & 29th June 2024 at 401 Seminar hall, ATMECE campus. The workshop aimed to equip participants with comprehensive knowledge and practical skills required for modern web development, covering both front-end and back-end technologies and to make the students industry ready.

Key Takeaways from Day-1: Participants gained proficiency in building responsive, visually appealing web pages using HTML, CSS, and JavaScript. They also explored the role of frameworks in accelerating front-end development.

Key Takeaways from Day-2: Participants learned how to develop robust back-end systems using Node.js and Express, create and manage databases, and deploy applications in realworld environments. They also gained insights into the importance of security and scalability in web applications.



Faculty Publications

Sl. No.	Authors Name (As in the journal)	Title of the Paper	Journal Name	Volume No / Issue No/ Pg. No	Date of Publication	DOI	ISSN/ISBN	Indexing
4	Sushma V(Thejkumar), Shereen Eliza S, Rachana S, Manasa, Thejashwini N	ATME College of Engineering Detection of Fake Profiles	IJIRCCE	12/5/6215-6219	May-24	10.15680/IJIRCCE.2024.1	2320-9801	Google Scholar
5	Sushma V(Thejkumar), Aishwarya N, Moulya M L, Veena M G, Varun R	NAMED ENTITY RECOGNITION[NER] IN MEDICAL FIELD USING NLP	IJARIE	10/3/2357-2364	May-24	Nil	2395-4396	Google Scholar
6	Sushma. V (Varadaraju), Amrutha, Likitha B, Yashwanth M, Akshay Gowda S	Automated Architecture Design for Solar Irradiance Prediction	IJCRT	12/ 5/184-189	May-24	Nil	2320-2882	Google Scholar
7	Shrilakshmi Prasad, Abhishek M, Arun Kumar N P, Dhanush Gowda G P, Dileep Kumar K	Drug Recommendation System Based on Sentiment Analysis of Drug Reviews Using Machine Learning	IJCRT	12/ 5/25-29	May-24	Nil	2320-2882	Google Scholar
8	Kalathma M K, Kashifa Zehra, Mohammed Labeeb, Mohammed Safwan, Mohammed Zain	Home Automation and Security System	IJCRT	12/ 5/421-424	May-24	Nil	2320-2882	Google Scholar
9	Kalathma M K, Bavitha N K, Likith Abhishek K, Vazeer Ahmed Bandenawaj Attar, Monith M	Real Time Smart Energy meter with Automatic Bill generation using IoT	IJCRT	12/5/233-237	May-24	Nil	2320-2882	Google Scholar
10	Kavyashree E D, Sathwik K, Syed Tayeeb, Syeda Afra, Tejas B V	Detection and Analysis of Autism Spectrum Disorder using Machine Learning	IJIRCCE	12 /5/ 6117-6121	May-24	10.15680/IJIRCCE.2024.12051	2320-9801	Google Scholar
11	Roopa B, Akash D S, Sangeetha T V, Shreeraksha A, Yashaswini B	Iot Based Accident Detection And Reporting (RAD) System	International Journal of Current Science (IJCS PUB)	14/2/31-37	May-24	Nil	2250-1770	Google Scholar

Faculty conferences

Sl. No.	National / International	Authors Name	Corresponding Author(s)	Title of paper	Conference Name	Name of the Conference Proceeding	Venue	Date of Conference	Pg. No.	ISSN/ ISBN
1	National	Roopa B, Nischitha GD, Pranam KU, Shreyas KC, Tanishka V	Pranam KU, Shreyas KC	IoT-Based Waste Segregator for Smart Cities	7th National Conference on Emerging Trends in Engineering, Science and Technology	NCETEST - 24	Hybrid Mode	April 30, 2024	9	978-81-972530-3-4

Toppers List

NAME	USN	CGPA
Rakshitha A N	4AD22CS087	9.29
Rajendra A	4AD22CS086	9.29
Rakshitha B A	4AD22CS088	9.29
Roopashree K N.Nayak	4AD22CS093	9.29

3rd Semester

5th Semester

NAME	USN	CGPA
Suchithra	4AD21CS098	9.06

NAME	USN	CGPA
Lakshmi C.	4AD20CS034	9.15
Deepika H.R.	4AD20CS022	9.15

7th Semester

Students Achievement



Congratulations!!

Mr. Rahul R, Participated in Base Ball Mysore City Inter Collegiate Tournament conducted at SBRR Mahajana First Grade College on 14-03-2024 and won 2nd Place.

Congratulations!!

Mr. Syed Mahtab M, Participated in "Start Up IDEAS" For INSTITUTE OF INNOVATION COUNCIL held on 21st, June, 2024 and Represented National level Inter College Entrepreneurship competition held at Cresta PU college on 9th and 10th March, 2024. He has Won 2nd Place in Competition.



"We are what our thoughts have made us; so take care about what you think. Words are secondary. Thoughts live; they travel far."

-Swami Vivekananda

ARTICLES

Artificial Intelligence

- Artificial Intelligence (AI) is a rapidly evolving field with a wide range of applications in various industries. In engineering, AI plays a crucial role in optimizing processes, improving efficiency, and enabling innovative solutions. It helps in designing complex systems, predicting equipment failures, and enhancing manufacturing processes.
- In society, AI has transformative potential. It's being used to enhance healthcare through image analysis and disease prediction, make transportation safer with autonomous vehicles, and even aid in disaster response through predictive modeling. AI-powered virtual assistants and language translation tools have also made communication across languages more accessible.

Some popular AI tools include:

- **Machine Learning Platforms:** TensorFlow, PyTorch
- **Natural Language Processing Tools:** spaCy, NLTK
- **Computer Vision Libraries:** OpenCV
- **Chatbot Development Frameworks:** Dialogflow, Rasa
- **Data Analytics Tools:** Tableau, Power BI.

Overall AI's Impact on Engineering and Society is profound, revolutionizing industries and improving lives through its innovative applications and tools.

- Additionally, AI-driven simulations facilitate the testing of prototypes and models, reducing the need for physical iterations and saving both time and resources. This has proven indispensable in areas like aerospace and automotive engineering.

Advantages of Artificial Intelligence:

- Automation.
- Data Analysis.
- 24/7 Availability.
- Medical Applications.
- Cost savings.

Disadvantages of Artificial Intelligence:

- Job Disruption.
- Bias and Fairness.
- Dependency.
- Privacy Concerns.
- Ethical Issues.
- Complexity.

The journey of AI is an ongoing one, marked by exciting breakthroughs and cautious navigation. It's imperative for us to continuously explore its potential, address its limitations, and ensure that its benefits are shared equitably across society. Responsible development, ethical use and an understanding of its implications will be key in shaping a future where AI contributes positively to our world.

Short Article on Artificial Intelligence
By



Rajendra,
4AD22CS086

4th semester, B section
Computer Science and Engineering Department,
ATMECE.



The Hacking Antiquity



Whether it is aimlessly surfing through the internet, managing businesses through important phone calls, or making a quick credit card transaction at your local grocery store, we have always been warned to remain cautious with our personal information.

The surge of technological advancements has indeed seen an uprise in services that enable humans to complete tasks with the mere swipe of a finger. But the exploitation of these services that range from harmless practical jokes to crimes that even strip people of their identity weren't anticipated well enough.

The term 'hack' originated at MIT in 1961 when students associated with the institute's 'Tech Model Railroad' hacked their train systems to enhance and modify their functions. These individuals were given the title of 'hackers' and they switched to the task of expanding the limits of the abilities of computers.

While computer hacking started gaining popularity, the art of 'phreaking' phone hacking – found its place too. John Draper, infamously known as 'Cap'n Crunch', used a hacking – found its place too. John Draper, infamously known as 'Cap'n Crunch', used a toy whistle found in Cap'n Crunch cereal boxes to fake a tone of the required frequency (2600 Hertz) that indicated to long lines that a connection was available to route a new call.

This technique made it possible for him and other phreakers to fool electronic telecommunication systems and make long distance phone calls at no cost. Moreover, the humble beginnings of tech pioneers such as Steve Jobs and Steve Wozniak as phone phreakers cannot be forgotten. The growth of technology promised a good enough growth for the hacking community as well.

Decades later, we have seen the rise of ethical hackers, lone wolf hackers, and even "hacktivist" groups such as 'Anonymous' that have exposed shocking government secrets and have led digital campaigns that claim to protect the general public from exploitation. Cyber security experts continue their efforts to enhance digital protection. However, hackers - both ethical and criminal have always managed to stay consistent and unsurprisingly up to date

Short Article on Hacking
By



Gangadhar Gowda K M,
4AD22CS032
, 4th sem, A section
Computer Science and Engineering Department,
ATMECE.

MILLETS- Manthra

What is Millet?

Millets are a group of highly variable small-seeded grasses, widely grown around the world as cereal crops or grains for human food and as fodder.

Why one should eat millets?

Millets are gluten-free, highly nutritious and rich in dietary fiber. They are rich in micronutrients, including calcium, iron, phosphorus, etc. They are low in Glycemic Index (GI) as such don't cause huge spike in blood sugar. Millets should ideally be an integral part of our daily diet. Dietary fiber in millets has water absorbing and bulking property. It increases transit time of food in the gut which helps in reducing risk of inflammatory bowel disease and acts as detoxifying agent in the body.

Mentioned below are the best health benefits of Millet. You can add millet in your diet plan to get all these health benefits.

- **Millet Good for Heart Patients**
- **Millet Helps in Weight Loss**
- **Millet Reduces Risk of Colon Cancer**
- **Millet Decrease High Blood Pressure**
- **Millets Prevents Celiac disease**
- **Millet Controls Diabetes**
- **Millet - Good Source of Antioxidants**
- **Millet Helps in slowing down muscle degradation**
- **Millet Aids in Sleep**
- **Millet Helps in relieving menstrual cramps**
- **Millet Improves Skin Elasticity**
-

Nutritional Value of Millet

Millet is counted on around the world to provide basic nutrition for many developing nations. Every 100 grams of millets contain 378 calories of energy, 4.2 grams of total fat out of which saturated fat is 0.7 grams, total carbohydrate content is 73 grams, dietary fibre is 8.5 grams, protein content is 11 grams, folate is 85 mcg, niacin is 4.720 mg, Pantothenic acid is 0.848 mg, Riboflavin is 0.290 mg, Thiamine is 0.421 mg, Vitamin B6 is 0.384 mg, Vitamin E 0.05 mg, Tocopherol alpha is 0.05 mg, Vitamin K is 0.9 mcg,

Calcium is 1%, Iron content is 17%, Copper is 38%, Magnesium is 28%, Manganese is 82%, Phosphorus is 28%, Potassium is 4%, Selenium is 4%, Zinc is 11%.

Millet Grains

Even though millet grains vary in size and color, they're all part of the grass family, which also includes wheat, rice, and barley. Millet also has two categories: large (major) and small (minor).

Large millets:

- **Pearl** is the most common type of millet and is usually white, yellow, gray, or even purple. The grains are among the biggest at about 3-5 millimeters.
- **Sorghum** millet has several shades, including white, yellow, and red, and they're usually about 4-6 millimeters.
- **Finger** (ragi) is almost always brown, and they're small, only 1-2 millimeters per grain.
- **Foxtail** grains are about 2-3 millimeters long, and they can range from red and black to white or yellow.
- **Proso** millet grains are about 3 millimeters long with lines running their lengths.

Small millets:

- **Little** millet grains are about 2-3 millimeters long, and they come in shades of gray and white.
- **Barnyard** millet also comes in shades of gray and white, and they're about 3 millimeters long.
- **Kodo** grains vary from blackish to dark brown, and the grains are about 3-4 millimeters long.
- **Browntop** grains are tan to white and about 4-5 millimeters in length.

The uses of millets are diverse. One can cook them for breakfast, lunch or dinner. Use millet rice instead of white rice in our recipes, and our dishes will be significantly healthier.

Ashwini P,
Assistant Professor,
CSE, ATMECE



