DEPARTMENT OF
COMPUTER SCIENCE & ENGINEERING
(ARTIFICIAL INTELLIGENCE & MACHINE LEARNING)

INTELLECT
2K24

INDEX

ABOUT INSTITUITION

St. Martin's Engineering College, an Autonomous Institution, is situated in a green environment and boasts cutting-edge infrastructure. The college has earned an esteemed A+ grade from NAAC, holds UGC Paramarsh mentorship, is NBA accredited, ISO certified, DSIR recognized, and serves as a remote center of IIT Bombay. It is a member of CII and holds MSME certification. With over 88 signed MoUs with major companies and institutions, the college has established strong collaborations.

For ambitious students, St. Martin's is a gateway to exciting careers, and institutions offer a treasure trove of internship and placement opportunities. Renowned publications like Career360, Competition Success Review, and Career Connect sing their praises, placing them among the best engineering colleges in India. The college is bestowed with the Governor Award on 4 distinct occasions, The Engineering Educators Award 2019; NIRDPR Award (Govt. of India), IDF Best Partner Award, Dewang Mehta Award, TCSION Award, CSI Award (Students Chapter), Best Innovation by Federation of Gujarat Industries and Street Cause-Most Dedicated Division, Best Sports College by Stumagz, Telangana, ICCAI National Leadership Excellence Award-2019

ABOUT THE DEPARTMENT

The department of Computer Science and Engineering (AI & ML), was established in 2020 with a capacity for 280 students. It features well-equipped labs with modern systems and up-to-date software, including a dedicated R&D lab with 36 internet-connected systems for research. The department also collaborates with multinational companies for technology training, placements, and internships. The faculty has authored 20 books and published 25 patents and 44 papers in renowned journals and conferences,including SPRINGER, IEEE, and SCOPUS.

Collaboration with industries is a prominent feature - offering credit courses, workshops, faculty development programs, internships, projects, and placement opportunities. Students benefit from industrial visits and in-plant training at esteemed companies. A key focus is on enhancing self-learning skills among students, facilitated by round-the-clock access to online resources from diverse platforms such as NPTEL, MOOCS, SWAYAM, OPACand J-GATE. This approach aims to empower students to become global leaders well-versed in the latest technologies.

Message from the Group Director

DR. P. SANTOSH KUMAR PATRA

The essence of learning lies in the pursuit of the truth, a principle staunchly upheld by St. Martin's Engineering College, which firmly asserts that education is the gateway to success. It is a source of immense pride that the newsletter 'INTELLECT,' released by the Department of Computer Science and Engineering (AI & ML), stands as a testament to the accomplishments of the year 2023. During this period, the department successfully organized various events, including guest lectures,webinars, and industrial visits. The faculty members and students made noteworthy contributions by publishing research papers in esteemed national and international journals such as UGC Care, Scopus, and SCI.

My sincere congratulations extend to the faculty members and students for their substantial achievements and unwavering dedication. I appreciate the efforts of Dr. K. SRINIVAS, the Head of the Department (HOD) of CSE (AI & ML), for his guidance in nurturing the talent within the department. Equally deserving of praise is the editorial board of the newsletter, whose exceptional role was pivotal in completing the task within the stipulated time frame. The passage concludes with a motivational note, urging the youth to be visionary and mindful of their actions, emphasizing the necessity of striving diligently, as there are no shortcuts to success.

Best wishes are extended for the department's academic, research, and developmental pursuits, with a hopeful anticipation of achieving greater heights in the future.

Message from the Principal

DR. M. SRINIVAS RAO

As we embark on a new year filled with promise and potential, I extend a warm welcome to each of you by our Newsletter - "Intellect". The Department of Computer Science Engineering (AI & ML)'s journey towards excellence in education continues. I am thrilled to witness the dedication and enthusiasm that our students, staff, and parents bring to our learning community. As we navigate the challenges and celebrate the triumphs ahead, let us remain steadfast in our commitment to fostering a nurturing and innovative environment where every individual can thrive. Let's embrace the opportunities for growth, collaboration, and success this year holds. Thank you for your unwavering support, and I look forward to another year of inspiring achievements.

Message from the
Head of the Department (HOD)

It brings me immense joy to present the most recent edition of our department's technical newsletter, 'INTELLECT.' This publication eloquently highlights the accomplishments of our students and faculty, emblematic of the collective dedication of a team committed to fostering the talents within our academic community.

DR. K. SRINIVAS

I convey my gratitude to our esteemed Principal for consistently providing encouragement and motivation to organize diverse events, publish articles in journals, participate in conferences, secure patents, and author books.

I seize this opportunity to express my sincere thanks to all members of the faculty and students in the CSE (AI & ML) Department for their genuine involvement and contributions. We are confident that "INTELLECT" will continue to shine as a beacon of innovation and intellectual pursuit.

FACULTY CORNER

Reaching new horizons....

Dr.K.Srinivas attended multiple Faculty Development Programs (FDP) and presented The Impact Of Artificial Intelligence on Forecasting Startup Success or Failure Using Crunchbase data and also presented Energy Efficient IOT Virtualization Framework Using Peer to Peer Networking and Processing.

Mr. D. Venkatesan participated in and shared knowledge through paper presenation on Traffic Sign Recognition Using Deep Learning For Autonomous Driverless Vehicles. Utilizing deep learning algorithms, this system enables autonomous driverless vehicles to accurately recognize and interpret traffic signs, enhancing road safety through real-time decision-making.

FACULTY
CORNER

Mrs. N. Radhamma engaged in and delivered numerous presentations on Automated Star Type Classification With Machine Learning Using NASA Data ; A Machine Learning Model for Average Fuel Consumption in Heavy Vehicles ; Traffic Sign Recognition Using Deep Learning for Autonomous Driverless Vehicles
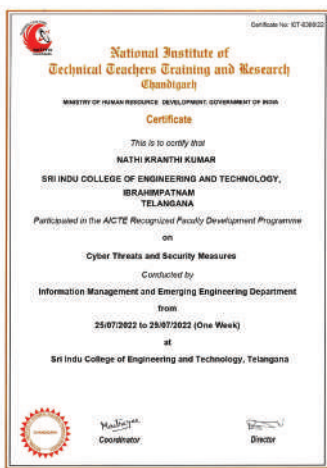

Mrs. G. Priyanka participated and presented multiple papers regarding Missing Child Identification System Using Deep Learning and Multiclass SVM ; Environmental Condition Monitoring Using AI Models Form IOT Sensor Telemetry Data ; Analysis and Detection Of Autism Spectrum Disorder Using Machine Learning Techniques.

FACULTY CORNER

Mr. N. Kranthi Kumar attended multiple Faculty Development Programs (FDP) and workshops namely Cyber Threat and Security Measures; Python Programming with Realtime Application; Data Analysis; Research Aspects : How to read and write a Research Paper; National Intellectual Property Awareness mission.

Mr. P. Mahesh actively involved in presenting multiple papers on Traffic Sign Recognition Using Deep Learning For Autonomous Driverless Vehicles; Predicting Dissolved Oxygen Levels in River Water using Machine Learning. This study utilizes ML algorithm to predict dissolved oxygen level in river water, to understand and manage water qualitu effectively.

PATENTS & SPORTS

1. Realisic Image generation of face from text description using fully trained Generative Adversial Networks (GANs) Application No.202341050258

2. Machine Learning techniques for detection of offensive and hate speech in tweets of regional languages Application No.202341050260

3. Depression detection using Electroencephalogram (EEG) Application No.202341050263

4. Detection of fake bank currency using machine learning algorithms Application No.202341050266

5. Price negotiating chatbot on e-commerce website Application No.202341050279

6. Image forensic for forgery detection in digital image copy and move Application No.202341050295

7. Detection of cyber bullying on social media using Machine Learning Application No.202341050285

Dr. K. Srinivas
Head Of Department
CSE (AI ML)

Mrs. N. Radhamma secured winner position in Throwball (Faculty-Women) of core Department & Tug of war (Faculty-Women) of non-core Department held on Annual Sports Day Celebration in September, 2023 at St. Martin's Engineering College.

Mrs. N. Radhamma
CSE (AI ML)

College Events

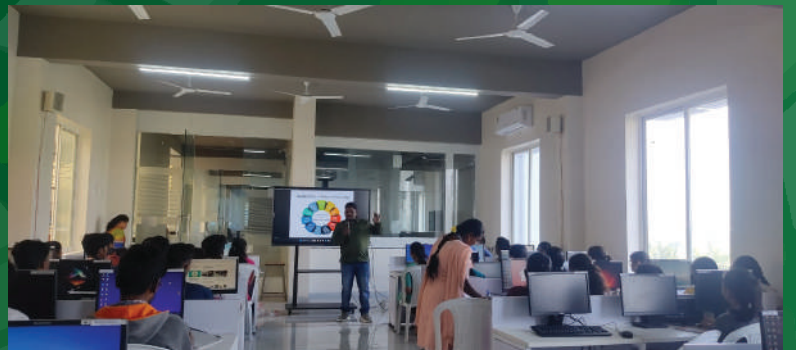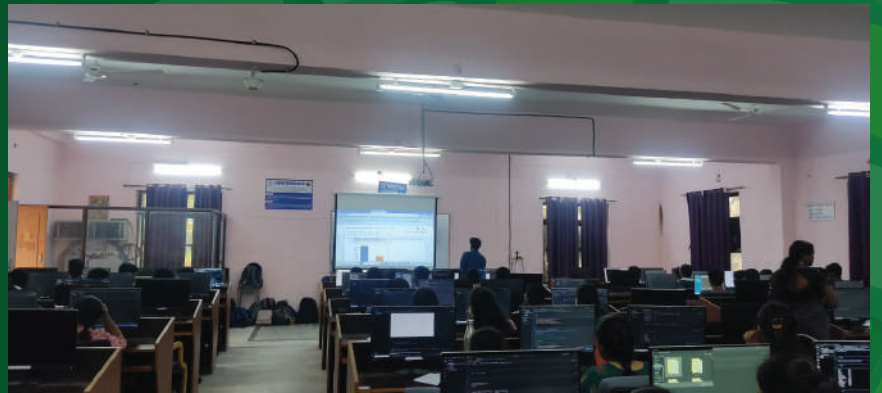## INDEPENDENCE DAY

GRADUATION DAY

'EAGLE' MOVIE - SONG LAUNCH

Internship for 2nd Years

140 students in an enriching internship focused on HTML and Python Django. These aspiring developers dedicated their time to gaining practical insights and hands-on experience, making significant strides in web development.

ACADEMIC PRODIGIES

In the walls of academia, these students have excelled and stood as beacons of inspiration for their hardwork, productivity and determination

III Year II Sem SGPA :

M. Sanjana - 8.64
A.Sudheer - 8.59
V. Yuvraj - 8.50

II Year II Sem SGPA :

Ch Rajarchitha- 8.95
A.Gahana Sree - 8.52
B. Akhila - 8.48

"Richness in your life doesn't depend on how you live but how you lead." - P. Raj Kumar, II Year, CSE (AI & ML) - B

Booming AI

Artificial intelligence, in fact, is obviously the single most important thing that humanity is working on.
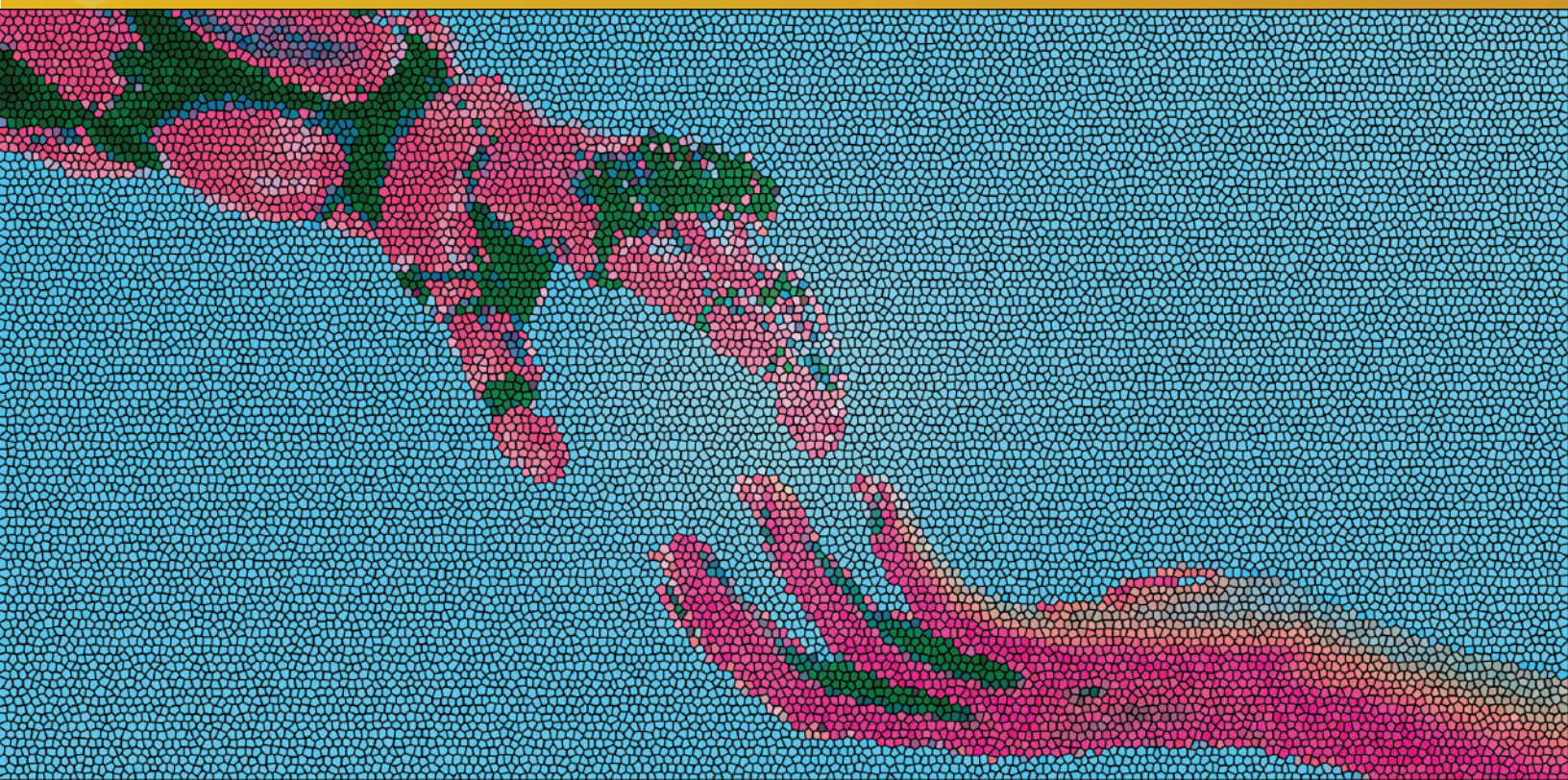**It's more important than electricity or fire.**

AI is a concept that has been around, formally, since the 1950s, when it was defined as a machine's ability to perform a task that would've previously required human intelligence. This is quite a broad definition and one that has been modified over decades of research and technological advancements.

Despite its widespread lack of familiarity, AI is a technology that is transforming every walk of life. It is a wide-ranging tool that enables people to rethink how we integrate information, analyze data, and use the resulting insights to improve decision-making. Our hope through this comprehensive overview is to explain AI to an audience of policymakers, opinion leaders,and interested observers and demonstrate how AI is already altering the world and raising important questions for society, the economy, and governance.

AI holds immense potential to revolutionize industries, enhance efficiency, and solve complex problems.However, ethical considerations, responsible development, and addressing societal implications are crucial to ensuring its positive impact on humanity. Balancing innovation with ethical frameworks is essential for harnessing the full potential of AI.

-R DOSHIK RAHUL
CSE (AI & ML) B, II Year

GENERATION NEXT

Syeda Adeeba Qadri (III Year) (21K81A6652) and G. Jai Shree (III Year) (21K81A6615) made waves at the recent 3rd International Conference on "Advances in Electrical and Electronics Engineering" (ICAEEE-2023) organized by the Department of Electrical and Electronics Engineering with their paper on an "IOT-Based Electric Vehicle Charging Station.

K.Harini Reddy (22K81A6632) successfully completed the course " The Joy of Computing Using Python" at Indian Institute of Technology, Madras (IIT-M). She achieved consolidate score of 73% in NPTEL and secured 23.13 score out of 25 in Online Assignments held in the month of July-September 2023.

The talented members of ARCUBED of III Year obtained the runner-up position in the 36-hour national-level hackathon, META-LOOP. It was organized by MLRIT in association with DeepLoop Technologies conducted in month of October. They ventured into the Healthcare sector and created an AR model that provides a virtual instruction manual for medical devices .

(Left to Right): N. Jatin Vishwas (III Yr.)),
N. Sai Venkat Prasad(III Yr), Nadia Shaikh(CSE),
Aman Jha(CSE) and Ch. Navya Sri (CSE)

THE COMING ERA INNOVATORS

KNV Varsha (21K81A6620) of III Year has completed a project on 'Face Recognition & OCR using OpenCV' at 40-hour Winter Training Program 2023 organized by Techobytes Technologies in association with E-Cell IIT Hyderabad. She was also an intern for 4 weeks in Java Programminng at CODSOFT .

MVS Aditya (III Yr) completed the foundation level course in Programming and Data Science at Indian Institute of Technology, Madras (IITM), Centre for Outreach and Digital Education in the month of May 2023.

The Champions' Diaries

"The football team of SMEC participated in the 15th Indian Open Inter-Engineering Collegiate event at VNRVJIET Sports Fest. Additionally, they secured the 3rd position in the 2nd State Level Sports Meet named Tejas - 2k23 held at Vardhaman College of Engineering."

Y Sanjana participated in volleyball at the National-Level Inter-College Sports Tournament held during ASHWATTHAMA '23, conducted at Sreenidhi Institute of Science and Technology from the 20th to the 22nd of November 2023.

Securing a position in the semi-finals of the Reliance Foundation Youth Sports (RFYS) event, our team has demonstrated exceptional prowess in the game of football. This accomplishment reflects the dedication and skill exhibited throughout the competition, underscoring our commitment to excellence on the field. The players from CSE (AI & ML) include Sarthak Rath (21K81A6629) - III Year, Ambedkar Manish (21K81A6604) - III Year, Kumaran (21K81A6647) - III Year, Bhargav Pattanayak (21K81A6607) - III Year

Bhushan Vyas (III Yr) has scored 104 (of 106) at BCC Cricket Grounds in a tournament organissed by Hyderabad Cricket Association

Pic : Bhushan Vyas

Guest lectures @ Swami Vivekananda Seminar Hall

(Clockwise) : Artificial Intelligence and Edge computing in Healthcare Management System ; National Level Workshop on Emerging Trends in Edge Artificial Intelligence ; Full Stack Web Developer Program ; National Level workshop on Trends in Machine Learning Applications

Teacher's day @ SMEC

P. Mahesh, faculty member specializing in CSE (AI&ML), was honored with " The Go Getter Teacher Award"

Dr. K. Srinivas, HOD of CSE (AI & ML) , was bestowed with the prestigious "Humblebrag " and "The Go-Getter Teacher" Awards.

Society Architects

Swachh Bharat

In December, a Swachh Bharat (Clean India) initiative was conducted in the college premises, reflecting the commitment to fostering a clean & hygienic environment. This program was meticulously organized to instill a sense of civic responsibility and environmental consciousness among the students and staff of CSE (AI & ML)

Triumphants @ Swayam Krushi 2k23

(Left to Right) : S Vishnu Vardhan Reddy, V Ayush Kumar, Shivuni Ganesh Chary, M.V.S. Aditya (All III Yr)

The stall named "Morse" secured the prestigious 1st prize. The innovative and meticulously crafted bracelets not only captivated the audience but also exemplified creativity and craftsmanship.

(Left to Right) : Kumaran (III Yr), Darshini (II Yr), Trisha (II Yr. IT), Ruchika (II Yr. AI&DS)

At the Swayam Krushi event on December 13, 2023, the stall "Wild West BBQ" secured the 2nd prize. Wild West BBQ was all about the culinary excellence of all the participants above and the menu that added a flavorful touch to the overall event experience.

HARMONY CRAFTERS

National Cadet Corps (NCC)

N. Apoorva
III Year

N. Apoorva, 21K81A6632 of III Year has successfully completed 10 days of Annual Training Camp (ATC) in the National Cadet Corps (NCC) and is now eligible to write the B-Certificate exam.
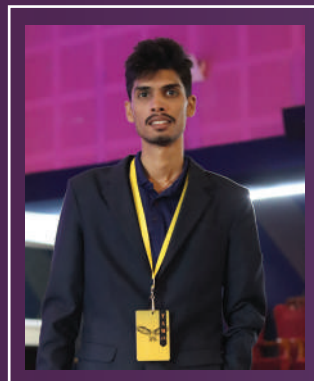

Teaching Tomorrow's Titans

Ch Rajarchitha (III Yr), organized an event, "Talk with Teens," at ZPHS High School Kompally in collaboration with the NGO organization "Friends of Needy." The program included a general quiz, and certificates were awarded to participants who excelled. The initiative aimed to enhance awareness of current market scenarios among children, fostering competitiveness and capability in their chosen career paths.

Club Aficionados

TAM VX

(Clockwise) : K V Aashrith Sarma, A Sanketh Reddy, S Veda Reddy, G Pranav Raj, K Santhoshi, B Pavan Kumar, B Sathwik

Google Developer Student Clubs

Kumaran (III Yr)
Cloud Lead

Harsh Rapaka (II Yr)
AI & ML Co-Lead

Bhargav Pattanayak (III Yr)
App Development Co-Lead

N. Sai Venkat Prasad (III Yr)
AI & ML Lead

Aditya Maddila (III Yr)
Competitve Programming Lead

Algorithms & Experiences @ vírtusa

During my internship at Virtusa, I led a skilled team in developing a groundbreaking healthcare AI chatbot. As the team captain, I navigated AI project management intricacies, securing a top 10 spot in India. I facilitated the fusion of advanced AI technologies with the intricacies of healthcare communication. This experience deepened my leadership skills and highlighted the transformative potential of AI in healthcare.

-B. Pavan Kumar, IV Year

At my Virtusa internship, I focused on data analytics for a Conversational AI Chatbot, creating insightful dashboards and integrating real-time analytics. Collaborating with a talented team, we enhanced the Chatbot's capabilities, providing hands-on experience and contributing to my professional growth in advanced analytics within the AI domain. I am grateful for the enriching experience and collaborative atmosphere at Virtusa.

-Ch. Chinmai, IV Year

@ Virtusa, I played a key role in refining the Spheroid AI Conversational Health Chatbot. I focused on NLP and user interface design, my contributions enhanced conversational capabilities. Engaging in dynamic teamwork highlighted the delicate balance between NLP and user-centric design, showcasing the power of collaborative expertise.

-P. Vihari, IV Year

At Virtusa, my internship immersed me in cutting-edge AI, particularly in developing a conversational chatbot. Hands-on work in NLP and ML deepened my understanding of language patterns, model development, and algorithm refinement. This experience expanded my technical skills and fostered a profound appreciation for the transformative potential of AI solutions across industries.

-Angel Mary Poulina, IV Year

At Virtusa, my internship focused on developing a conversational AI chatbot, emphasizing language model (LLM) technologies and database systems. Collaborating within the team, I contributed to enhancing the chatbot's conversational fluency and efficiency, gaining valuable insights into AI development and database utilization. This immersive experience at Virtusa served as a catalyst for my growth in AI and intelligent system development, expanding my technical repertoire for future projects.

-M. Sanjana, IV Year

Believe In Yourself

**Harsh Rapaka
CSE (AI & ML) - A
II Year**

At times when I was feeling low,

I found a person who had an eye contact,

Without any verbal phrase,

He understood everything in a moment,

All those insecurities,

All the heavy feelings within me,

All those panic moments, those shivering hands,

All the anxious situations in my mind,

The future predictions,

Those suicidal thoughts roaring in my mind,

Conquering and dominating my subconsciousness,

Leading towards the worst version of me,

I try to hug him and cry aloud!!

But the moment I moved forward,

I realised it was my reflection in a mirror.

C'est la vie...

A GAHANA SREE
III YEAR

"Don't be afraid to be different"
– Michael Jackson

The world has always kept me curious with it's never-ending maze. I used to look upon the stars at night and wonder whether they all are the same. I look at all flowers in a garden and wonder why each flower has a unique color. Then I look at the humans in a random supermarket and observe the groceries they take.

We, humans, tend to socialize with others and try to find similarities. But the blatant truth is that no matter how hard you try, you'll end up being different. "*Trying to fit in a society*" should never be something that holds you back, instead it should uplift your endeavors. The day feels long if you had a bad day, but short if you had a happy one. And… "*so does life*", if you ask a grandpa on a street. So, do not waste it. Do not think of *everything* that people say, which bounds you to unhealthy thoughts about yourself which would practically be of no use in the future. *You ARE special*. Never pretend to be someone you're not just to get the attention. If you're really keen on that, acting might be the right career for you.

"*If you think good, you do good*". Start telling your mind that. It's important to understand what our value is before we try to see what value we hold for others. So, just focus on your '*drive*' that is leading you to wake up every day in the morning. *Be grateful* of what you have right now at this moment. Believe in yourself. Try to be curious. Life has so much to offer. Whether it's the stars in the sky, the flowers in a garden, or the random people in a supermarket, all have their own spark.

Art Gallery

DARSHINI
22K81A6675
CSE (AI&ML) - B
II Year

SRIJJAN THUMMAJI
21K81A6651
III Year

ILLURI DHANYATA
21K81A6619
III Year

2nd year into SMEC...

In the year 2022, a momentous journey in the realm of artificial intelligence commenced at St. Martin's Engineering College, shaping my path towards a future filled with boundless possibilities. From the very first day, the college emanated an electrifying energy and a sense of belonging that made it feel like a second home. The emphasis on research and extracurricular activities enhances our skills and fosters a sense of teamwork. Engaging in webinars and workshops conducted by industry experts became a regular part of my journey, allowing me to stay at the forefront of the rapidly evolving AI landscape.I have gained valuable skills and knowledge that will help me in my future career and research endeavors. I am proud to be a part of this prestigious institution and branch.

R. Akhila
CSE (AI & ML) - B
II Year

I'm delighted to share my enriching student experience at St. Martin's Engineering College, particularly within the Computer Science and Engineering (CSE) branch with a specialization in Artificial Intelligence and Machine Learning (AI&ML). My educational journey has been marked by valuable learning and personal growth, thanks to the exceptional faculty and supportive peers at the institution.

St. Martin's Engineering College boasts state-of-the-art infrastructure and facilities that have significantly contributed to both my academic and extracurricular pursuits. The CSE(AI&ML) branch, recognized as one of the most sought-after and innovative courses in the country, offers a comprehensive curriculum covering both theoretical foundations and practical applications of artificial intelligence and machine learning.

Through this program, I have acquired essential skills and knowledge that I believe will be instrumental in my future career and research endeavors. I take great pride in being associated with this prestigious institution and the CSE(AI&ML) branch, and I am confident that the experiences and education I've gained here will positively shape my professional journey.

K. Shashank
CSE (AI & ML) - A
II Year

May We Meet Again

It felt like skies dropped
when the news of him leaving me behind reached my ear.
It was the night of summer where the new crops yielded in the
farms, but my heart sank in agony !!
Tears in eyes....
Questions in mind...
I shut myself through the course of time.
We soaked ourselves in the rain of life,
 but he left me alone in the thunders of death.
He was my everything !
my uncle,
my friend,
my philosopher and an ultimate inspiration worth learning from.
He always knew about everyone, also kept us together at times.
I never deliberated my life without him pushing me to greater heights.
It was just a week ago on 1st of May, we laughed and spoke about welcoming him home after discharge,
Every known heart prayed for his speedy recovery
but no one knew this would be our last talk and that we would never again hear his laugh.
After two days.... his moral shattered and so were his "lungs".
The person he was, vanished in the darkness of thoughts.
In his hitching voice and fatigued eyes he told his brother that he was "tired to fight", but never he gave up.
He struggled for a week and lived his final moments with his brother.
In his remembrance....
In peace may he leave the shore
In love may he find the next
Safe passage for his travels
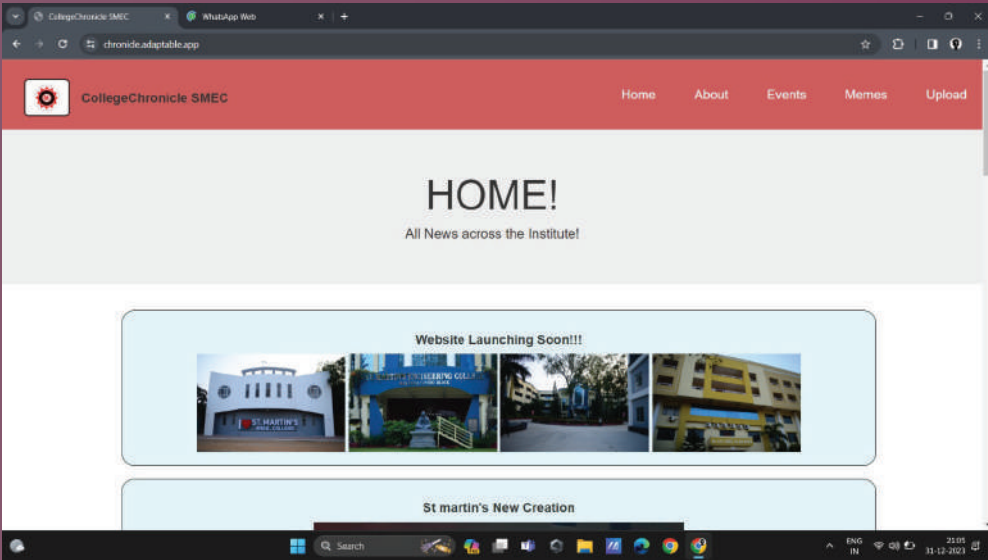Until our final journey to the ground....

B. Sahasra
CSE (AI & ML) - A
II Year

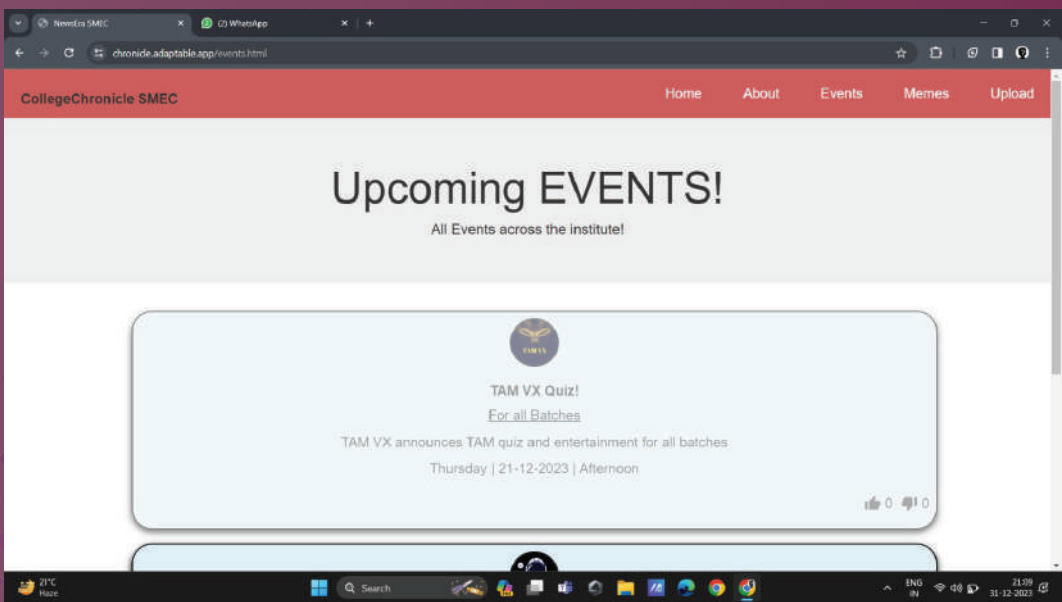# College Chronicles

(A DYNAMIC WEBSITE)

College Chronicles is a web application which provides all news across the campus including event updates, placement updates and more.

All upcoming college events in TAM,COHO,GDSC clubs events will be updated in the website soon...

BHARGAV PATTANAYAK
21K81A6607
III YEAR
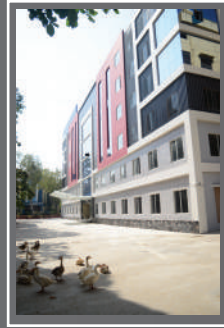
Tech Stack :

Node.js

Express.js

Mongodb

To Visit: http://chronicle.adaptable.app

PHOTO FEATURES

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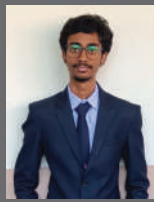## STUDENT LEAD EDITOR :

A Gahana Sree
21K81A6602
III Year

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21K81A6632
III Year

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21K81A6632
III Year

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