Aditya College of Engineering

Department of

Computer Science and Engineering

MANAARMS

Magazine

Academic Year 2021-22

Machine Learning-Future Technology

Scope of technology

Editorial Board

Chief Editor:
Dr.G.S.N.Murhty
HOD-CSE

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G SRIVARSHINI - 18MH1A0525

VATTIKUTI BHASKAR - 18MH1A05A8

BOMMANA M SAINADH - 19MH1A0570

Chairman's Message

I believe in the philosophy of thought, word and deed as eternal which made Aditya what it is today.

My thought to set a high bar to the institutions I setup by rising to the challenges of the educational field and get prepared for a life dedicated to the pursuit of knowledge.

My word which always reflected my vision and gained the conviction of the heads of the institutes and parents.

And my deed which makes my home and workplace as extensions of each other by considering the staff and students as the members of my extended family shaped Aditya

Dr. N.SESHA REDDY
CHAIRMAN

I know the value of a good education, more so because I did not have the benefit of the facilities that make the learning process smooth. I began my career as a lecturer, giving up my desire of qualifying in the Service Commission Examination. Out of my despair was born a strong determination which took the shape of Aditya Educational Institutions.

Challenges, Competition and the fear of failure are natural, but success embraces those who face these with the can-do attitude. For me this can-do attitude is backed up by our state-ofthe- art infrastructure, picturesque & inspiring setting and devoted team of faculty-members and administrators. The learning ambience at all the constituting Institutions is perfectly suited for all-round growth and academic excellence. Today, the group has a proud record of evolving efficient, confident and highly knowledgeable technocrats, managers, pharmacists and entrepreneurs with global thinking and futuristic mind-set.

The present-day job market poses fresh challenges that need to be managed innovatively. Global business Incubation centre, Microsoft Innovation Centre, Technical Skill Development Institute, T-hub, Training and Placement Cell, GATE coaching etc., act as perfect vehicles for this.

Computer Science and Engineering

Vice-Chairman's Message

As a direct product of Aditya I know how my father toiled to place Aditya on the academic map of the country through its various phases of expansion even under the most trying circumstances.My Masters degree from UTS Australia, the best university in the continent, has given me deeper understanding and insight into the education system. This was coupled with the ideology of my father which enabled me to take the onus of steering Aditya. In succession, Aditya technical campus, Surampalem has been established to offer professional education in Engineering, technology, management and pharmacy with the core concepts of

Dr. N SATHISH REDDY
VICE-CHAIRMAN

quality and excellence Ever since its inception in 2001, the campus has registered speedy progress by upholding its abiding commitment to advance knowledge and educate students in science and technology. The prime aim of the campus is to make teaching and research relevant to the practical world.

The campus offers numerous opportunities for the aspiring students which lay a strong foundation for the corporate world. T-Hub is a specimen of numerable opportunities provided to students with enough competitive inputs to become T-shaped engineers, facilitate internship opportunities on the campus, develop partnerships with corporate and etc. through its various programs.

The ultimate aim of Aditya is to make the campus the 'first stop' for companies in the recruitment process.Keeping in view the demands of the work nvironment which is beyond just knowledge and marks, a lot of emphasis is laid on the overall personality development of the students.

Finally a desire can change nothing, a decision can change something but a determination can change everything. For sure Aditya is strongly determined to provide its students a successful career

Computer Science and Engineering

Principal's Message

Dr. A.RAMESH
PRINCIPAL

"Those who educate children well are more to be honored than parents, for these only gave life, those the art of living well."

- Aristotle.

The significant problems we face cannot be solved at the same level of thinking we were at when we created them." - Albert Einstein. It is only through knowledge that man attains immortality. Knowledge has to expand or grow to remain knowledge. The road to excellence is toughest, roughest and steepest in the Universe. The world requires and honors only excellence. Available information has to be directed by wisdom and intelligence to create new knowledge. Promotion of creativity is the new role of education. It is only through creative thinking that the present and future problems can be addressed to find dynamic solutions.

Technology should be used to help remove poverty from the world. In fact 40% of the world's poor are in India. Confidence leads to capacity. It is faith in oneself that produces miracles. Education at ACOE helps build Character, Strengthen the mind, expand the intellect and establish a culture of looking at problems in a new perspective. The student is put through rigorous training so that he can stand on his own feet after leaving the portals of the Institute.

Computer Science and Engineering

HOD Message

Dr.G.S.N.Murthy
M.Tech., Ph.D

The scope of computer science is endless. The students of the computer science and engineering are highly demanded by the recruiters of the top companies. Through innovative teaching- learning process a teamwork approach and leadership building experience, our students gain vital communication and critical-thinking skills. Our institution provides a platform for the students to enhance their employability skills through Industry Institute Collaboration.

Computer Science and Engineering

Computer Science & Engineering

Department of Computer Science and Engineering has been successfully functioning since 2008. It offers B.Tech (Computer Science and Engineering) with an intake of 120 students and M.Tech (Computer Science and Engineering) with 18 students.Department of CSE has good interactions and MOUs with leading technology domain Training & Development Industries. Department of CSE under ACOE, signed pacts in the form of MoUs with Infosys (Campus Connect), Microsoft (Campus Agreement), APSSDC. It organizes Exhibitions, Conferences, Seminars and Workshops for both students and Faculty belonging to various Technical Educational Institutions all over India.Our students are placed in various top MNCs like Infosys, TCS, Tech Mahindra, Accenture, Cognizant, Samsung etc., for deserving & esteemed packages of more than 4.0 Lakhs to 31.31 Lakh per Annum. Faculty of CSE are always dedicated and devoted towards the comprehensive development of their students by training them physically through enough sports & games; psychologically through technical competitions globally. The department of CSE as a whole aims at the development of leading Computer Science Professionals with ethical values & societal concern.

Department Vision

To be a recognized Computer Science and Engineering hub striving to meet the growing needs of the Industry and Society

Department Mission

M1:

Imparting Quality Education through state-of-the-art infrastructure with industry collaboration.

M2:

Enhance Teaching Learning Process to disseminate knowledge.

M3:

Organize Skill based, Industrial and Societal Events for overall Development.

Computer Science and Engineering

PEO's

PEO 1: To develop Computer Science and Engineering professionals to identify, analyze and design solutions in the field of computing.

PEO 2: To enable to propel in demonstrating professional ethics, leadership and engaging in lifelong learning.

PEO 3: Prepare themselves as a responsible professionals in the domain of interest

PSO's

PSO 1: Ability to design, develop, test and maitain reliable software and intelligent systems in interedisciplinary domains.

PSO 2: Potential to deliver knowledge with profesionalism in optimizing solutions and pursue lifelong learning.

Computer Science and Engineering

Machine Learning
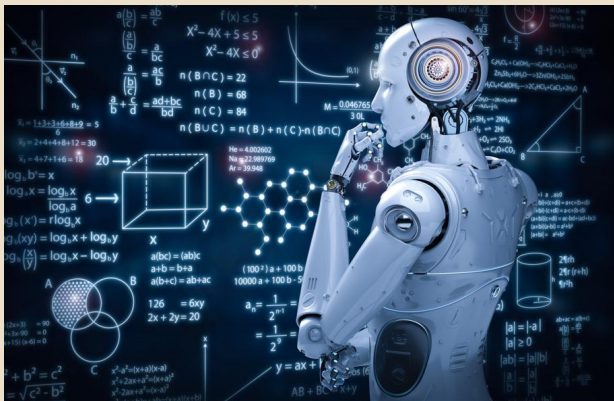
Machine learning, harnessed to extreme computing, aids fusion energy development

Linking techniques from machine learning with advanced numerical simulations, the researchers take an important step in state-of-the-art predictions for fusion plasmas. The researchers used an optimization methodology developed for machine learning to dramatically reduce the CPU time required while maintaining the accuracy of the solution.

Fusion energy:

Fusion offers the promise of unlimited, carbon-free energy through the same physical process that powers the sun and the stars. It requires heating the fuel to temperatures above 100 million degrees, well above the point where the electrons are stripped from their atoms, creating a form of matter called plasma. On Earth, researchers use strong magnetic fields to isolate and insulate the hot plasma from ordinary matter. The stronger the magnetic field, the better the quality of the insulation that it provides.

Techniques emerging from the field of machine learning are well suited to optimize just such a calculation. Starting with a set of computationally intensive local calculations run with the full-physics, first-principles CGYRO code (provided by a team from General Atomics led by Jeff Candy) Rodriguez-Fernandez and Howard fit a surrogate mathematical model, which was used to explore and optimize a search within the parameter space. The results of the optimization were compared to the exact calculations at each optimum point, and the system was iterated to a desired level of accuracy. The researchers estimate that the technique reduced the number of runs of the CGYRO code by a factor of four.

KARAPA GAYATHRI
19MH1A0522

Trends & Technology

STUDENT ARTICLES

6 Ways to Make Your Wi-Fi Router Work Faster

1/6 6 ways to make your Wi-Fi router work faster
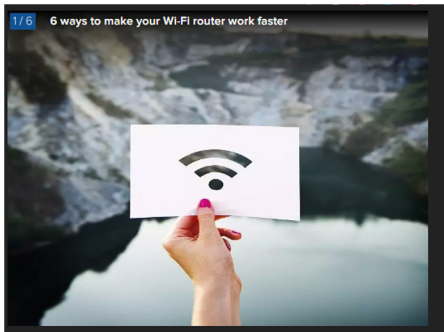
Lets face it. There can be nothing more frustrating than trying to surf the internet using Wi-Fi that is agonizingly slow. While there are several companies that make claims of superfast speeds, there is no dearth of complaints from users about slow internet speeds. It is important to remember that Wi-Fi waves are radio waves that travel small distances and are picked up by smartphones. Unfortunately, if anything comes in the way of these waves, they get blocked, causing slow internet speed. Here's what you need to keep in mind when it comes to your Wi-Fi router...

2/6 Never place the router on the floor
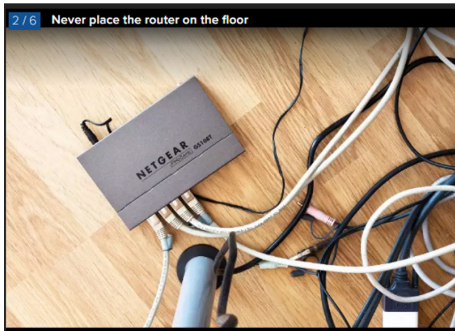
Home routers are designed in such a way that they emit signals downward. So, when you place your router on the floor, the signal goes towards the floor instead your smartphone/ laptop. Wi-Fi waves need no obstruction whatsoever in order to function well.

3/6 Don't place the router in an enclosed space

While you may want to protect your precious router from dust, water, breakage, etc, keeping it in a locked cupboard or cabinet will render it almost useless. This is because the signal will get absorbed by the door of the closet, rendering the router almost useless. Instead keep it on a shelf that is slightly higher so that there are lesser chances of damage.

4/6 The placement of your router

This is the most important thing you need to keep in mind. Remember, Wi-Fi waves are easily absorbed by things that come in their way, hence, you need to place your router at a place where there will be minimum hindrance. Place it in a room that is accessible from all corners of the house. This way it will ensure that the signal strength is equal in all areas of the house.

5/6 Pay attention to the antennas

Just in case your modem has two external antennas, make sure you keep one pointed straight up while the other one should be tilted horizontally towards the left.

6/6 Keep electronic items away from your router

It's pointless to keep your router next to your computer, thinking the speed will pick up. On the contrary, television sets, kitchen appliances, computers, etc will interfere with your router's signals, making the signal weak. Make sure that you keep your router away from any electronic devices that may impact Wi-Fi speed.

PALAPARTHI VENNELA
19MH1A0540

Trends & Technology

STUDENT ARTICLES

New AI System Can Decode Your Mind

WASHINGTON: Scientists have developed a new artificial intelligence system that can decode the human mind, and interpret what a person is seeing by analysing brain scans. The advance could aid efforts to improve artificial intelligence (AI) and lead to new insights into brain function. Critical to the research is a type of algorithm called a convolutional neural network, which has been instrumental in enabling computers and smartphones to recognise faces and objects. "That type of network has made an enormous impact in the field of computer vision in recent years," said Zhongming Liu, an assistant professor at Purdue University in the US."Our technique uses the neural network to understand what you are seeing," Liu said.

Convolutional neural networks, a form of "deep-learning" algorithm, have been used to study how the brain processes static images and other visual stimuli. "This is the first time such an approach has been used to see how the brain processes movies of natural scenes - a step toward decoding the brain while people are trying to make sense of complex and dynamic visual surroundings," said Haiguang Wen, a doctoral student at Purdue University.

The researchers acquired 11.5 hours of Functional magnetic resonance imaging (fMRI) data from each of three women subjects watching 972 video clips, including those showing people or animals in action and nature scenes.

The data was used to train the system to predict the activity in the brain's visual cortex while the subjects were watching the videos. The model was then used to decode fMRI data from the subjects to reconstruct the videos, even ones the model had never watched before. The model was able to accurately decode the fMRI data into specific image categories. Actual video images were then presented side-by-side with the computer's interpretation of what the person's brain saw based on fMRI data.

"I think what is a unique aspect of this work is that we are doing the decoding nearly in real time, as the subjects are watching the video. We scan the brain every two seconds, and the model rebuilds the visual experience as it occurs," said Wen, lead author of the study published in the journal Cerebral Cortex.

The researchers were able to figure out how certain locations in the brain were associated with specific information a person was seeing. "Using our technique, you may visualize the specific information represented by any brain location, and screen through all the locations in the brain's visual cortex," Wen said.

"By doing that, you can see how the brain dividves a visual scene into pieces, and re-assembles the pieces into a full understanding of the visual scene," he said.

JATLA RENUKA
20MH1A0522

MANAARMS

INTERNSHIP'S

S.NO	REG. NO	BRANCH	NAME OF THE COMPANY	DURATION IN WEEKS
1	18MH1A0502	CSE	CALSOFT	12
2	18MH1A0504	CSE	CALSOFT	12
3	18MH1A0521	CSE	CALSOFT	12
4	18MH1A0522	CSE	CALSOFT	12
5	18MH1A0528	CSE	CALSOFT	12
6	18MH1A0532	CSE	CALSOFT	12
7	18MH1A0558	CSE	CALSOFT	6
8	18MH1A0581	CSE	CALSOFT	6
9	18MH1A0514	CSE	CALSOFT	6
10	18MH1A0595	CSE	CALSOFT	6
11	18MH1A0536	CSE	AWS	6
12	18MH1A0519	CSE	CAPGEMINI	6
13	18MH1A0576	CSE	CAPGEMINI	6
14	18MH1A0579	CSE	CAPGEMINI	6
15	18MH1A0524	CSE	DXC	2
16	18MH1A0525	CSE	DXC	2
17	18MH1A0575	CSE	DXC	3
18	18MH1A0591	CSE	DXC	3
19	18MH1A0543	CSE	WIPRO	2
20	18MH1A0548	CSE	WIPRO	3
21	18MH1A0550	CSE	WIPRO	3
22	18MH1A0565	CSE	WIPRO	3
23	18MH1A0574	CSE	WIPRO	3
24	18MH1A0577	CSE	WIPRO	3
25	18MH1A05A4	CSE	WIPRO	2
26	19MH5A0502	CSE	WIPRO	2
27	19MH5A0503	CSE	WIPRO	2
28	19MH5A0506	CSE	WIPRO	2
29	19MH5A0507	CSE	WIPRO	2
30	19MH5A0510	CSE	WIPRO	2
31	19MH5A0513	CSE	ATOS SYNTEL	6
32	18MH1A0533	CSE	ADP	6
33	18MH1A05A8	CSE	PERSISTENT SYSTEMS	7
34	18MH1A0580	CSE	TCS	7
35	18MH1A0567	CSE	THOUGHTCLAN TECH	3
36	18MH1A0546	CSE	VALUE MOMENTUM	3
37	18MH1A0553	CSE	VALUE MOMENTUM	3
38	18MH1A0596	CSE	VALUE MOMENTUM	3
39	19MH5A0511	CSE	VIT	3

Computer Science and Engineering

PLACEMENTS

CONGRATULATIONS

#AdityasPride

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ADITYA
COLLEGE OF ENGINEERIING
Surampalem, Andhra Pradesh, INDIA

Congratulations

Tevitt Sai Majji

Dept. of CSE

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ENLIGHTENS THE NESCIENCE

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Department of Computer Science and Engineering

Hearty Congratulations

SURAJ SAI B
17MH1A0506

K S S SAIRAM
17MH1A0526

N MOUNIKA SURYA
17MH1A0542

MOHIT P
17MH1A0594

M SAI PRAVEEN
17MH1A05B4

for their selection in

INFOSYS With **3.50** LPA

ADITYA
ENLIGHTENS THE NESCIENCE

ADITYA
COLLEGE OF ENGINEERING

Department of Computer Science and Engineering

Hearty Congratulations

CHINTAPALLI VIKAS REDDY
17MH1A0512

for his selection in

Infosys HACKWITH INFY With **5.00** LPA

Computer Science and Engineering

CONGRATULATIONS

ADITYA
COLLEGE OF ENGINEERING

Hearty Congratulations

G M KRISHNA
17MH1A0407

M S RAGHURAM
17MH10435

J CHANUKYA SAI
17MH10464

ARAVINDESWAR K
17PC1A0424

A V NAIDU
17MH1A04A7

K SRI RAM
17MH1A04C1

CH VIKAS REDDY
17MH1A0512

M N V S B MANIKANTA
17MH1A0586

for their selection in

Accenture — With **4.50** LPA

ADITYA
COLLEGE OF ENGINEERING

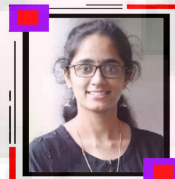**Department of Computer Science and Engineering**

Hearty Congratulations

CH VIKAS REDDY
17MH1A0512

KRISHNA SATYA SAI G
17MH1A0521

JAYA SREE V
17MH1A0555

Y SAI SREE DURGA
17MH1A05B3

for their selection in

CAPGEMINI — With **3.80** LPA

ADITYA
COLLEGE OF ENGINEERING

Department of Computer Science and Engineering

Hearty Congratulations

V SAI VINEELA
17MH1A0556

A V VINEELA
17MH1A0561

K S L MHALAKSHMI
17MH1A0576

P CHANDRAMOULI
17MH1A05A1

MOHIT PADAMATA
17MH1A0594

V S K SUBHASH
17MH1A05B1

Y S S DURGA
17MH1A05B3

L GOVINDA
18MH5A0502

for their selection in

DXC Technology — With **3.60** LPA

ADITYA
COLLEGE OF ENGINEERING

Congratulations
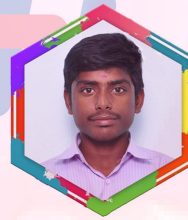
B V S S S L CHAKRAVARTHI
18MH1A0561

D R PARATPARA RAO
19MH5A0504

K O L N JAYANTH
18MH1A0473

KRISHNA SRIKANTH K
18MH1A04C6

G S VENKATA PAVAN
19MH5A0409

for their selection in

HEXAWARE — With **3.5** LPA

Computer Science and Engineering

MANAARMS

SOME OF OUR RECRUITERS

calsoft

techigai

DXC TECHNOLOGY

Capgemini

ALTIMETRIK

tcs TATA CONSULTANCY SERVICES

wipro

Hexaview
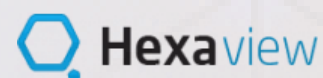
Computer Science and Engineering

FACULTY ACHIEVEMENTS

FDP'S ATTENDED

S.No	Name of the Faculty	No.of FDPs Attended
1	Dr. Pullela S V V S R Kumar	1
2	Dr.G.S.N.Murthy	1
3	Dr. B. Annapurna	1
4	Dr. M.Uma Devi	1
5	T.Veerraju	2
6	V.Chandra Sekhararao	1
7	Dr.U.N.P.G.Raju	1
8	Dr.B.Kiran Kumar	1
9	V.Anantha Lakshmi	1
10	Y.Ravi Raju	2
11	T.Satya Kumari	4
12	N Praveen	2
13	P.N.S.Lakshmi	3
14	V Veera Prasad	2
15	G.V.R.Pavan Kumar	1
16	A.Krishna Veni	2
17	V.Neelima	2
18	M M V Bala Murali Krishna	2
19	K.Giridhar	2
20	A.Hanumantha Rao	2
21	Y. Suresh Kumar	2
22	K.K.V.Satyanarayana	3

Computer Science and Engineering

FACULTY PUBLICATIONS

S. No.	Name of the Faculty Author	Title of the Paper	Name of the Journal	ISBN/ISSN Number	Vol/ Month	Index No UGC/ Scopus	URL/DOI
1	Dr. B Kiran Kumar	Facial Emotion Recognition and Detection Using CNN	International Journal of Computer Sciences and Engineering	2347-2693	2/14	Scopus	https://turcomat.org/index.php/turkbilma t/article/view/12070
2	Dr. B. Annapurna	The Element of Emotional Intelligence and their Impact on Social Relation	International Journal of Early Childhood Special Education	1308-5581	14/3	Scopus	https://www.int-jecse.net/data-cms/articles/202205 07124317pm555.pd f
3	Dr. B. Annapurna	Proposing a reliable method of securing and verifying the credentials of graduates through blockchain	EURA SIP Journa l on Information Security	ISSN: 2510-523X	2021:7	Scopus	https://jis-eurasipjournals.spri ngeropen.com/articl es/10.1186/s13635-021-00122-5
4	Dr. B. Annapurna	Air Pollution: Effect on Human Health and Live Reporting Using IOT Technology	Turkish Journal of Physiotherapy and Rehabilitation	2651-4451	32/3	Scopus	https://dergipark.org .tr/en/pub/tjpr
5	Dr. B. Annapurna	PeltierRadiator: The Smart Heating/Cooling System for Vehicles with IOT Reporting	Turkish Journal of Physiotherapy and Rehabilitation	2651-4451	32/3	Scopus	https://dergipark.org .tr/en/pub/tjpr

Faculty – Ph.Ds. Enrolled

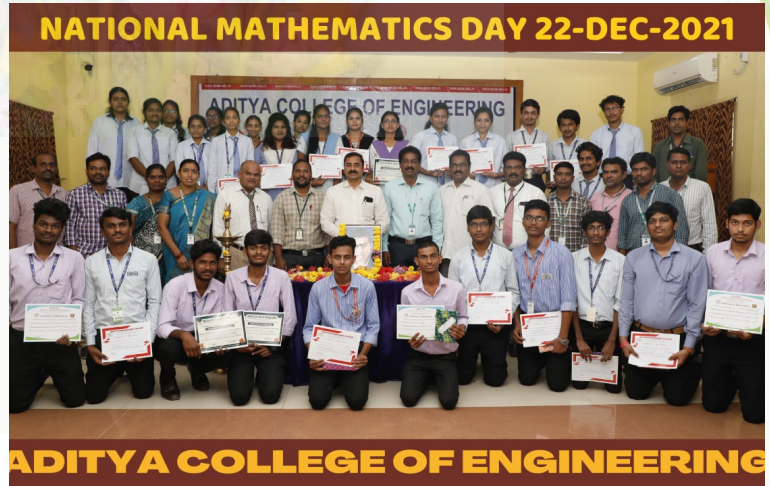| S. No.	Name of the Faculty	Area of Research	Name of the University	Name of the Guide	Date of Enrollment
1	N.Praveen	Machine Learning	GIET University, Gunupur	Dr.Raghavendra Agarwal	23-04-2022

BOOKS' & CHAPTERS PUBLICATIONS

Sl. No	Name of the Faculty Author	No of Authors	Main Author/ other	Title of the Book Chapter	Name of the Publisher	ISBN Number
1	Dr. G.S.N.Murthy	3	other	Machine Learning: Principles & Applications	Princeton Press	978-920-5-20215-9
2	Dr.B.Kiran Kumar	4	Main Author	Computer Networks	Scientific International Publishing House	978-93-92922-83-4

Professional Society Memberships

Sl. No.	Name of the Faculty	Name of the Professional Society	Membership Number	Life/Annual
1	Dr. Pullela SVVSR Kumar	Computer Society of India(CSI) – Institutional Membership	F8002532	Life
2	Dr. Pullela SVVSR Kumar	International Association of Engineers (IAENG)	163296	Life
3	Dr.G.S.N.Murthy	IAENG	164690	Life
4	Dr. G.S.N.Murthy	CSTA	----	Life
5	T.Veerraju	CSI	F8002533	Life
6	T.Veerraju	IAENG	164691	Life
7	T.Satya Kumari	IAENG	164689	Life
8	N Praveen	CSI Member	F8002534	Life

MANAARMS

Celebrations

Ugadi Celebrations

Ugadi Celebrations

NATIONAL MATHEMATICS DAY 22-DEC-2021

ADITYA COLLEGE OF ENGINEERING

Achievers Day

Surampalem, Andhra Pradesh, India
33V8+6QJ, Surampalem, Andhra Pradesh 533437, India
Lat 17.092902°
Long 82.06659°
23/04/22 12:02 PM

Surampalem, Andhra Pradesh, India
33V8+8R2, Surampalem, Andhra Pradesh 533437, India
Lat 17.093384°
Long 82.066842°
23/04/22 12:23 PM

Computer Science and Engineering

Games & Sports

Congratulations!

JNTUK INTER COLLEGIATE
"POWER LIFTING CHAMPIONSHIP 2021-2022"
74 KGS Weight Category
"GOLDMEDALIST"
Mr. B.S.S.PAVAN KUMAR
HELD AT GMRIT,RAJAM

ADITYA COLLEGE OF ENGINEERING

CONGRATULATIONS

JNTUK INTER COLLEGIATE
"BODY BUILDING CHAMPIONSHIP 2021-2022"
Mr.P.H.K.VARA PRASAD
65KGS GOLD MEDAL
HELD AT GMRIT,
RAJAM.

ADITYA COLLEGE OF ENGINEERING

NATIONAL YOUTH DAY 3KM RUN MEDALIST

3K VIRTUAL RUN/WALK 2022

Congrats!

ADITYA COLLEGE OF ENGINEERING

Computer Science and Engineering