

MAY 2021, Issue 2

HORIZON

DEPARTMENT OF ECE





Dr. T. K. Rama Krishna Rao
PRINCIPAL

Principal's Message

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 ACET 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.

Vision

-->To emerge as a centre of excellence in education and Research

Mission

-->To establish skill and learning centric infrastructure in thrust areas

-->To develop Robotics and IOT based infrastructure Laboratories

-->To organize events through industry institute collaborations and promote innovation

-->To disseminate knowledge through quality teaching learning process.



Dr. R V V KRISHNA
HOD ECE

ECE department was established in the year 2004 with an intake of 60 students and now it has been expanded with an intake of 240 students. ECE plays a vital role in Technology Revolution. Our main aim is to generate new knowledge by engaging in cutting-in research to promote academic growth and to develop human potential to its fullest extent so that intellectually capable & imaginatively gifted leaders can emerge in a range of professions. We have Modern state of the art and well furnished labs like Microwave and Optical Communication Lab, Electronic Devices and Circuits lab, Modern Communication Lab, Research lab etc with excellent laboratory facilities and dedicated faculty.

HAPPY LIBRARIANS DAY

FATHER OF LIBRARY SCIENCE IN INDIA



"August 12th is being celebrated as National Librarian's Day in India, in remembrance of national professor of library science, Dr S R Ranganathan (1892-1972), who had spearheaded library development in India."



LIBRARIANS DAY IN INDIA

NATIONAL LIBRARIAN'S DAY CELEBRATION-2020

August 12th is being celebrated as National Librarian's Day in India, in remembrance of national professor of library science, Dr S R Ranganathan (1892-1972), who had spearheaded library development in India. 12th August is celebrated as National Librarian's Day in India. Dr. S R Ranganathan (1892-1972), born on 12 August 1892, came from a moderate background in British-ruled India. He was born in the small town of Shiyali (now known as Sirkazhi), in the state of Tamil Nadu in southern India. Ranganathan began his professional life as a mathematician; he earned B.A. and M.A. degrees in mathematics from Madras Christian College in his home province, and then went on to earn a teaching license. His lifelong goal was to teach mathematics, and he was successively a member of the mathematics faculties at universities in Mangalore, Coimbatore and Madras (all within the span of five years). As a mathematics professor, he published a handful of papers, mostly on the history of mathematics. His career as an educator was somewhat hindered by a handicap of stammering (a difficulty Ranganathan gradually overcame in his professional life). The Government of India awarded Padmashri to Dr. S.R. Ranganathan for valuable contributions to Library Science. Five Laws of Library Science: • Books are for use • Every reader his/her book • Every book, its reader • Save the time of the reader • A library is a growing organism

**A library is the delivery room
for the birth of ideas, a place
where history comes to life.**



Norman Cousins



poezi

Running Out of Time

Life is complicated.
There will always be problems.
Stress is a distraction
from what's really important.
Don't wait for things to get better.
Count your blessings;
Learn to be happy right now;
Otherwise you might run out of time.

By Joanna Fuchs

Life Is Precious

The gracefulness
of a butterfly,
How gentle,
and fragile they seem.

Gently fluttering,
on a calm summers day,
Floating like ,
a dream.

But sadly,
there time is over,
Hardly before
it's begun.

So enjoy
your special moments,
Like a butterfly,
In the sun.



Pull Your Troubles

At night before you sleep, my dears,
You must reach deep inside
And pull your troubles out your ears
Wherein they like to hide.

A trouble is the kind of thing,
It's very often true,
That bothers you more than the soul
Who passed it on to you.

Life is too short to worry
Life is too short to be sad
Life is too short to ponder
on things you will never have
Life is too short for sadness
Life is too short for tears
Never count the day
Never count the years
Life is too short for falling out
Life is too short for war
Life is a gift, don't waste it
Life is so much more

John F Connor!



#TECHFEST



GET YOUR
VACCINE

DIGITAL VEDA 2K21

THE SAGA OF UNBEATEN



ADITYA GROUP OF ENGINEERING COLLEGES

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INTERNATIONAL CONFERENCE 2021

22nd & 23rd October, 2021

the address of your event goes here

<http://icacet.in>

Email : icacet2021@acet.ac.in

ADITYA

COLLEGE OF ENGINEERING & TECHNOLOGY
Surampalem, Andhra Pradesh, INDIA

ADVANCES IN COMPUTER ENGINEERING & COMMUNICATION TECHNOLOGY

The International Conference on Advances In Computer Engineering & Communication Technology (ICACET-2021) aims to bring together academicians, industrialists, researchers and research scholars to exchange and share their experiences and hard-earned technological advancements and applications in Computer Science and Communication Technologies. The theme of ICACET-2021 focuses on the domains of Data Science, Internet of Things (IoT), Wireless Communication, Sensor Networks and other emerging technologies.

Sponsored by AICTE



ICACET 2021

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Organizing by
Dept. of IT, CSE & ECE

Achievers' Day 2K21

11TH Sep

Department Of Electronics & Communication Engineering





AICTE Annual Vishwakarma Awards 2020

The following students participated in **AICTE REGIONAL LEVEL CHHATRA VISHWAKARMA AWARDS 2020** Competition and proposed a project on **“SHOE RAKSHAK - SMART SHOE FOR WOMEN SAFETY USING IOT”**



STUDENTS ATTENDED :

- 1) Ms.S Swathi
- 2) Ms.S L Emerald
- 3) Ms.T Padma Priya
- 4) Ms. T U S V V Aishwarya

FACULTY MENTOR : P Swarna Latha, Assistant Professor

Achievers' Day 2K21

11TH Sep

Department Of Electronics & Communication Engineering





STUDENT & FACULTY ARTICLES

A 10 SECOND COVID-19 ANTIBODY TEST

Researchers at Carnegie Mellon University, in collaboration with the University of Pittsburgh (Pitt) and UPMC, have developed one of the fastest known COVID-19 antibody tests. The test results are available in 10 to 15 seconds and detect the presence of two of the antibodies to SARS-CoV-2, the virus responsible for COVID-19. Such a quick and effective test could be a game-changer for controlling the spread of the pandemic.

The breakthrough test would require a very small drop of blood from a fingertip (less than five microliters) to identify two antibodies of the virus: spike S1 protein and receptor binding domain (RBD). It can detect antibody concentrations at an extremely low level, one picomolar (0.15 nanograms per millilitre), through an electrochemical reaction within a handheld microfluidic device. Results are sent almost immediately to a simple interface on a smart phone. The device can be cleaned (i.e. regenerated) within one minute using a special chemistry discovered by the researchers that allows multiple, successive readings from the same device.

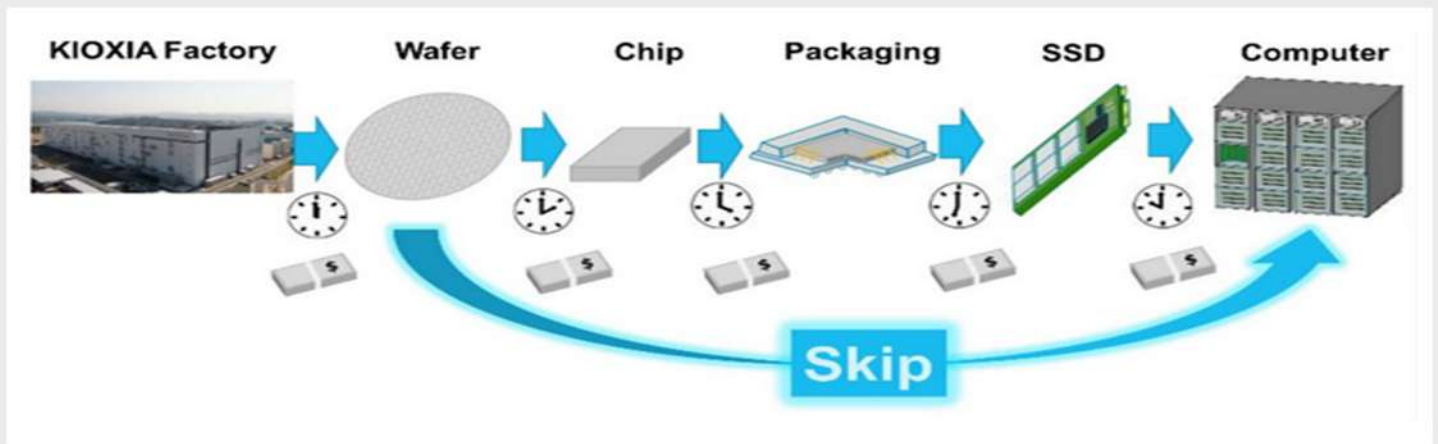
Tiny, inexpensive gold micropillar electrodes are printed at nanoscale using aerosol droplets that are thermally sintered together. This causes a rough, irregular surface that provides increased surface area of the micropillars and an enhanced electrochemical reaction, where antibodies can latch on to antigens coated on the electrode. The specific geometry allows the micropillars to load more proteins for detection, resulting in very accurate, quick results.



Dr. Abu Bakar SIDDIQUE

wafer Scale SSD

Shigeo Oshima spoke about wafer-level SSDs during the online VLSI Symposium 2020 in a presentation on the future of flash memory. The chief engineer of the NAND flash manufacturer Kioxia, formerly Toshiba Memory thus underscored the group's claim in the development of innovative storage solutions parallel to the acquisition of the SSD division of Lite-On.



Until now, technical innovations in SSDs have been achieved primarily through additional cell layers such as 3D NAND or PLC NAND, which have further increased storage capacities. However, the manufacturing process of the various NAND types is identical. In the first step, chips are cut from a silicon wafer similar to those used in CPU and GPU production. These are then placed in a chip housing (packaging), which is then installed on the boards of SSDs and other storage media.

The new manufacturing process presented by Kioxia is intended to replace a large part of the costly production process by using the wafer itself as an SSD. The so-called “super multi-probing technology” is to be used for this purpose, which makes it possible to address the chips on the wafer directly in a computer as mass storage. At present, wafer probers are used in quality control in order to sort out faulty circuits at an early stage, the so-called wafer-level SSDs should be significantly cheaper to manufacture due to the simplified production process and thus enable storage media with hundreds of chips, which offer significantly higher speeds.



SNEHA M JOSEPH



FACULTY ACHIEVEMENTS



BEST PAPER AWARD



Dr.R.V.S.Lalitha from CSE department received “Best Paper Award“ for presenting paper titled,“ Real Time Nitrogen, Phosphorus, Potassium (NPK) Detection in Soil using IoT , 6th International Conference on Emerging Applications of Information Technology(EAIT), EAIT 2020, Feb 25-27,2021, Kalyani University, Kalyani, West Bengal, India in association with CSI Kolkata chapter



Mr.R.Anil Kumar, Assistant Professor, Department of ECE qualified in National Eligibility Test(NET-2020).

CONGRATULATIONS



Dr VIVEK RAJPUT

for your

PhD degree

Research Title

“Novel approaches of detection handoff and Hybrid MAC Protocol in Cognitive Radio Network”



D KISHORE



I RAMESH RAJA



- 1) Dr. Vivek Rajpoot, Filtering Antennas: A Technical Review, International Journal of RF and Microwave Computer-Aided Engineering, ISSN 1099-047X, <https://doi.org/10.1002/mmce.22797>
- 2) Dr T.S. Karthik, Certain classes of analytic functions connected with Q analogue of the Bessel function ,Hindwai Journal of Mathematics, <https://www.hindawi.com/journals/jmath/2021/5587886>
- 3) Rama Vasantha Adiraju, A survey on lung CT datasets and research trends, Research on Biomedical Engineering, ISSN 2446-4740, <https://doi.org/10.1007/s42600-021-00138-3>
- 4) P. Anantha Sravanthi ,Road extraction using aerial images for future navigation ,Materials Today: Proceedings, ISSN 2214-7853, doi.org/10.1016/j.matpr.2021.05.537
- 5) A. Arun Kumar Gudivada, Design of Baugh-Wooley Multiplier in Quantum-dot Cellular Automata using a novel 1-bit Full Adder with Power dissipation analysis. SN Applied Sciences, <https://link.springer.com/article/10.1007%2Fs42452-020-2595-5>
- 6) Dr. A B Siddique, Critical Investigation of Up-conversion and Dual Emission from Nitrogen Functionalized Graphene Quantum Dots, Elsevier: Journal of Luminescence, doi.org/10.1016/j.jlumin.2022.118763
- 7) Dr. T. S. Karthik, Zero and Nonzero Mass Flux Effects of Bioconvective viscoelastic nanofluid over a 3-D Riga Surface with the swimming of gyrotactic , International Journal of Advances in Mathematical Physics, <https://doi.org/10.1155/2021/9914134>
- 8) Dr. T. S. Karthik, MHD Flow of Thermally Radiative Maxwell Fluid Past a Heated Stretching Sheet with Cattaneo-Christov Dual Diffusion, International Journal of Mathematics, <https://doi.org/10.1155/2021/5562667>

9) Dr. T. S. Karthik, A Comparative Study on Crack-Healing Ability of Al₂O₃/SiC Structural Ceramic Composites Synthesized by Microwave Sintering and Conventional Electrical Sintering, Advances in Materials Science and Engineering Journal under Processing and Applications of Advanced Functional Materials, <https://doi.org/10.1155/2021/3170697>

10) Dr. T. S. Karthik, Investigation on Dielectric Properties of Press Board Coated with Epoxy Resin, Quartz, and Rice Husk Ash, Advances in Materials Science and Engineering Journal under Processing and Applications of Advanced Functional Materials, <https://doi.org/10.1155/2021/983977042>

11) Dr. T. S. Karthik, Improved Learning Environment for Mathematics Course Through Blend Learning, Annals of the Romanian Society for Cell Biology Journal, Scopus, Volume-25, 1583-6258





STUDENT ACHIEVEMENTS



ASIANCON 2021

INNOVATION IN TECHNOLOGY. ASIAN CONFERENCE. 2021



**The following students presented papers in
ASIAN CONFERENCE 2021**



M SURYA JYOTHI

18P31A04E3



P AMRUTHA

18P31A04F9

PAPER ID 835 : Highly Isolated Fork-shaped MIMO Antenna for 5G Application

PAPER ID 836 : Textile UWB MIMO Antenna for Wireless Applications

GATE 2021



K S M ABHIRAM
AIR : 8226



M PRAJWALA
AIR : 7394



P V CH PAVAN
AIR : 6374



M P BHARADWAJ
AIR : 5213



17P31A04G7



17P31A04N0



17A61A0401



17A61A0431



17A61A0445

Batch : 2017-21

CONGRATULATIONS



17P31A04L6



17P31A04J9



17P31A04N0



17P31A04C7



Batch : 2017-21

CONGRATULATIONS



D RADHA KRISHNA
17P31A04J4

WILEY
mthree

11 LPA



V RAGHU
17P31A04N7

 **JUSPAY**

11 LPA

CONGRATULATIONS



D KHYATI SRI
17P31A0410



19 LPA



P DEVI BHAVANI
17P31A0446



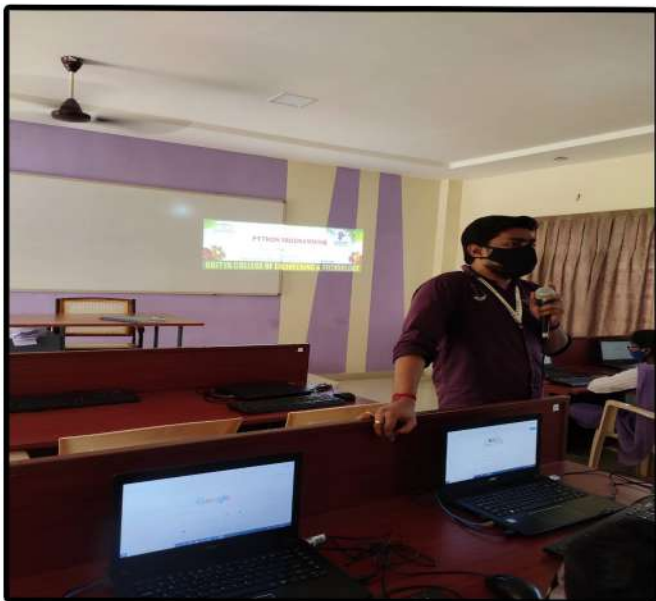
WORKSHOP ON PYTHON

A 15 day workshop on Python has been conducted from 19-04-2021 to 03-05-2021 in Aditya College of Engineering & Technology under APSSDC Training Initiative.

Total No of Students : 60

Workshop Co ordinator : V PREETHI

Trainers : 1) Mr.P Hanuman Kumar
2) Mr.N.Subbareddy
3) Mr.Ch.Ramesh





Vision:

Utripod will become one of the most successful apps to create short films, webseries etc. It will become the most common app for everyone because everyone can use this and improve their talents.

Mission:

We will give Power to the users to create, make, promote their businesses shortfilm, film, webseries etc.

Utripod gives them support and every user can make this as a backbone to improve their career in film, business and etc.

How it was started:

Our app idea was started from us on July 2019 with the name of UTRIPOD and in April 2020, we decided to create a website and by the end of June 2020 we launched our website. After launching our website, we got very good feedback from the public, so after that review we decided to develop an Android app.

What exactly is UTRIPOD:

- . It is a social networking app.
- . It is used to connect with your friends and make new friends.
- . On UTRIPOD app you can share messages, pictures, videos, short videos (Uvis) and personal information.

Features in UTRIPOD:

- . Advanced search
- . Hastages
- . U- Chats and groups
- . Uvis (short videos)
- . Promotions

UTRIPOD recruitment:

- . After launching our andriod app we will make it as a startup.
- . In this startup we hire and recruit quality employes to fulfilling the startup projects.
- . The candidates must aware of all programming languages and soft wares developing courses.

Team of UTRIPOD:

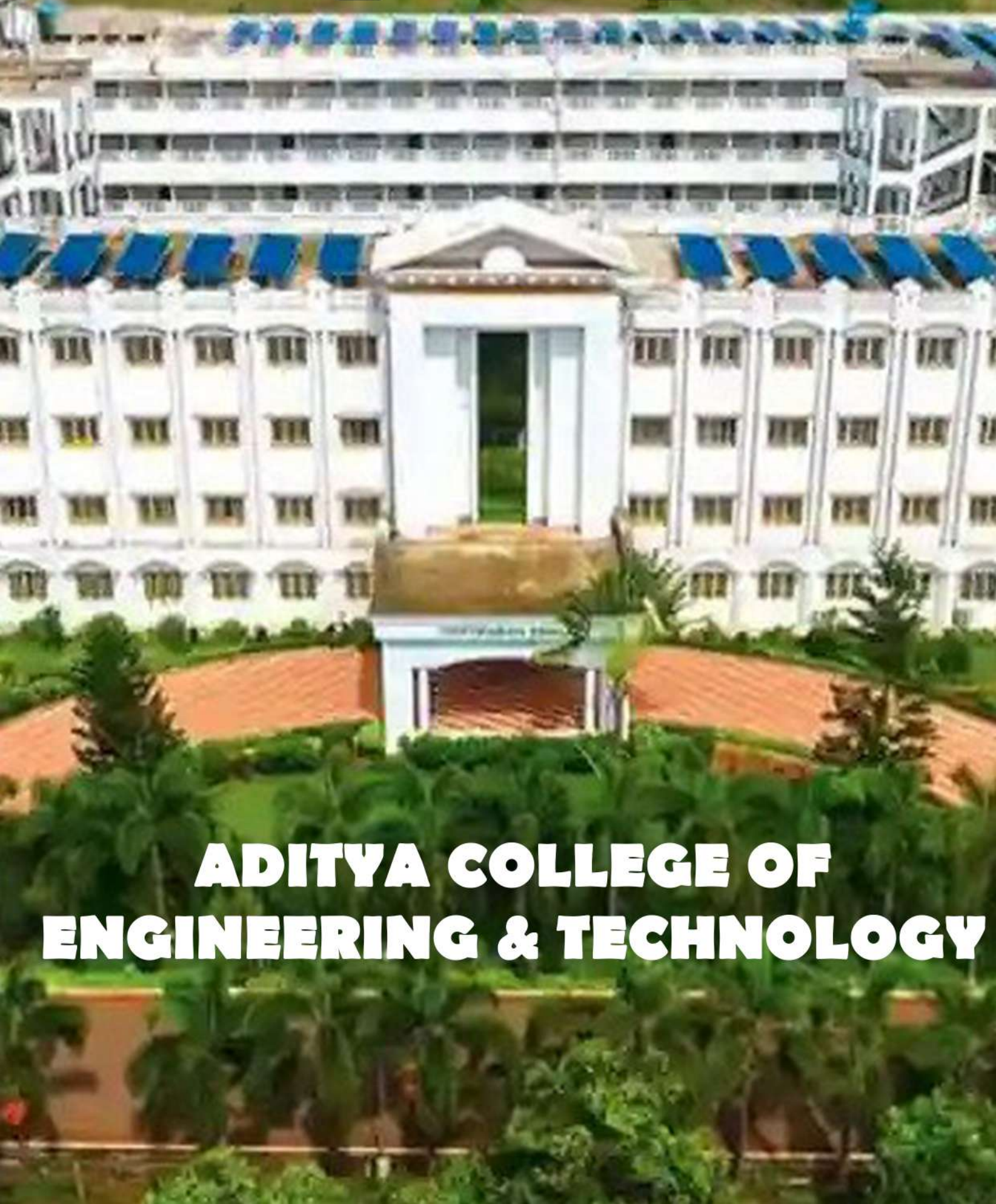
- . S.Durga satish reddy (Founder)
- . N.v s s gowri shankar (Founder)
- . Sandeep pentapati (marketing)
- . K. prassanna teja (marketing)
- . V. Aslesh (Graphic designer)
- . K. Ram laxman (professional editor)



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| 5. T DEEPAK REDDY | 18P31A04B1 |
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