# **INFOBYTE**

**Volume 6** Issue 1(Jun-Nov) 2022-2023

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING



# ADITYA ENGINEERING COLLEGE (A)

APPROVED BY AICTE, NEW DELHI, PERMANENTLY AFFILIATED TO JNTUK, KAKINADA

# Chairman's Message

Dr. N Sesha Reddy



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

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

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 for 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 a can-do attitude. For me, this can-do attitude is backed up by our state-of-the-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-around 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 a futuristic mindset.

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.

#### I wish you all the best



# Vice Chairman's Message

## Dr. N Satish Reddy

As a direct product of AdityaI 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's degree from UTS Australia, the best university in the continent, has given me a 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 concept of 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 aspiring students which lay a strong foundation for the corporate world. T-Hub is a specimen of innumerable opportunities provided to students with enough competitive inputs to become T-shaped engineers, facilitate internship opportunities on the campus, develop partnerships with corporate and industry giants, etc. through its various programs.

The ultimate aim of Adityais to make the campus the 'first stop' for companies in the recruitment process. In this regard training and placement, cell takes utmost care to groom students according to the needs of the industry.

Keeping in view the demands of the work environment which is beyond just knowledge and marks, a lot of emphasis is laid on the overall personality development of the students. Various clubs run by the students, events like VEDA (technical fest) and COLOURS(youth fest), etc. challenge the latent talent in the students and bring them to the fore.

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 with a successful career

Wish you Good Luck

# SECRETARY'S MESSAGE



# Mr. N Deepak Reddy

As we 100k to the future, one thing is certain - knowledge. Will be a key resource and will be highly sought-after around the world. To meet this, Aditya primarily focuses on educating and training students to work in fields where they will be valued both for their specialized knowledge and for their ability to research, communicate and solve problems.

Learning is not just confined to the classroom at Aditya. It is something beyond that in the form of conferences, workshops, seminars, guest lectures, Hackathons, Appons, project making, community initiatives, sports, cultures, clubs, and other co-curricular and extracurricular activities. These activities expose students to aspects beyond the curriculum, thus adding value to their professional success. The magnificent infrastructure of Aditya and the dynamic and qualified staff set the right ambiance for facilitating these activities.

Owing to my education in one of the best schools in India, The Good Shepherd School, Ooty, and the exposure I gained there, especially in the field of Information Technology, I am fully aware of the ever-increasing demand of the world.

With a close watch on the dynamics of the fast-changing world which urges the academicians to give the right impetus for making life-long learners, we ensure the ongoing relevance of our academic programs twined with substantial training on Industry- oriented employability skills and scientific assessment and evaluation. Also, with a belief that character, without which a man thought may be useful to himself, would not be useful to society, we strive to create responsible students who are epitomes of the highest ethics and social conduct.

I am very delighted to express that the quality of Adityans is recognized by the employers who offer jobs to our students even before the announcement of the results. Our alumni are contributing to their professions and have earned senior positions in public & private sectors nationally and internationally



# Principal's Message

### Dr. M Sreeenivasa Reddy

#### "THE WHOLE PURPOSE OF EDUCATION IS TO TURN MIRRORS INTO WINDOWS.." - SYDNEY J.. HARRIS

Aditya Engineering College boasts professionalism personified by way of world-class campus amenities, sustaining quality education for the students to enhance their employability quotient. The holistic approach of the institute stimulates a paradigm shift towards 'Global education', and innovation students by inspiring fresh perceptiveness, creative thinking, and firm conviction to achieve true success.

With an aim to build the youth for the future, the college aims to nurture budding talents in the field of engineering and technology as per industry needs. The college with novel programs relentlessly tries to transform students' potential into rewarding careers resulting in national progress.

**Best Wishes...** 

# **About Computer Science and Engineering**

The Department was established in the year 2001 with intake of 60. The intake was increased to 120 in the year 2005 and 180 in the year 2013. The department accredited by NBA in the year 2008. Department has well experienced and qualified faculty. The Department is recognized as "Research Centre" by JNTUK, in the year 2018 and 2021.

The department aims at promoting quality and value-based education by harnessing the skills of students, creating awareness on the advancements in Computer Science and preparing them for the agile industry.

The department is offering UG &PG (CSE) programmes. Department is having CSI Students Chapter & ISTE Student and Faculty Chapters. The Department as Well-equipped Laboratories and Centre of Excellence.

# Vision of the Department

To emerge as a competent Centre of excellence in the field of Computer Science and Engineering for industry and societal needs.

## Mission of the Department

**Mission 1** 

Impart quality and value based education

Mission 2

Inculcate the inter personal skills and professional ethics

**Mission 3** 

Enable research through state-of-the-art infrastructure

Mission 4

Collaborate with industries, government and professional societies

#### STUDENT ACHEIVEMENT









#### Games

## **Plantation**



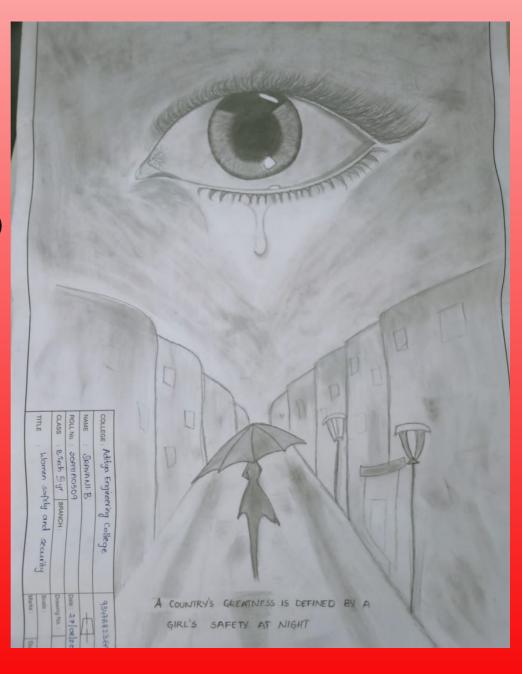


Clean India Programme

# PENCIL SKETCHES



B Sravavni (20A91A0509)



# **B Sanjana (20A91A05D7)**





#### WE ARE ENGINEERS.

We the brain behind the beauty,

The soul behind the beast,

We have our own style with an extraordinary lifestyle,

We are the ghost with a subsequent nightmare,

We create our own filmware.

We struggle against the forces of evil, we are Civil.

We perform logical, we are Electrical.

We have our own tutor, we are Computer.

We love to be single, we are Mechanical.

We have water allergy, we are Metallurgy.

We use logical tricks, we are electronics.

We build the nation to fulfil your imagination.

We sleep in the morning and wake up in night,

From attendance to existence we fight.

We create the world,

We design the world,

We lighten the world,

We always work for invention with a better intention,

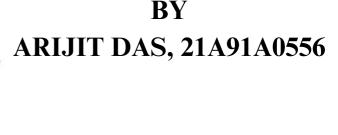
We the warrior and your dream carrier

We fill your carts with our beautiful arts,

From corporate tank to private bank,

We exist.

HAPPY ENGINEERS DAY.



JE/



		C	R	O	S	S
+		R	0	A	D	S
	D	A	N	G	Е	R

BY
ARIGELA SASI VENKATESH,20A91A0548

## TECHNICAL ARTICLES

#### **CYBER SECURITY**

Cyber security might not seem like an emerging technology, given that it has been around for a while, but it is evolving just as other technologies are. That's in part because threats are constantly new. The malevolent hackers who are trying to illegally access data are not going to give up any time soon, and they will continue to find ways to get through even the toughest security measures. It's also in part because new technology is being adapted to enhance security. As long as we have hackers, cyber security will remain a trending technology because it will constantly evolve to defend against those hackers.

As proof of the strong need for cyber security professionals, the number of cyber security jobs is growing three times faster than other tech jobs. According to Gartner, by 2025, 60% of organizations will use cyber security risk as a primary determinant in conducting third-party transactions and business engagements.

ISHNU VARDHAN VARMA 21A91A0532

## **INTERNET OF THINGS (IOT)**

Another promising new technology trend is IoT. Many "things" are now being built with Wi-Fi connectivity, meaning they can be connected to the Internet—and to each other. Hence, the Internet of Things, or IoT. The Internet of Things is the future, and has already enabled devices, home appliances, cars and much more to be connected to and exchange data over the Internet.

As consumers, we're already using and benefitting from IoT. We can lock our doors remotely if we forget to when we leave for work and preheat our ovens on our way home from work, all while tracking our fitness on our Fit bits. However, businesses also have much to gain now and in the near future. The IoT can enable better safety, efficiency and decision making for businesses as data is collected and analyzed. It can enable predictive maintenance, speed up medical care, improve customer service, and offer benefits we haven't even imagined yet.

And we're only in the beginning stages of this new technology trend: Forecasts suggest that by 2030 around 50 billion of these IoT devices will be in use around the world, creating a massive web of interconnected devices spanning everything from smart phones to kitchen appliances. The global spending on the Internet of Things (IoT) is forecast to reach 1.1 trillion U.S. dollars in 2023. New technologies such as 5G is expected to drive market growth in the coming years.

And if you wish to step foot in this trending technology, you will have to learn about Information security, AI and machine learning fundamentals, networking, hardware interfacing, data analytics, automation, understanding of embedded systems, and must have device

and design knowledge.





#### **Editorial Board**

# **Editor in Chief**

Dr. M. Sreenivasa Reddy

**Principa** 

#### **Associate Editors**

Dr. A. Vanathi Associate Professor & HOD

Mr. M. Kalyan Ram<sub>Assistant Professor</sub>

Mrs. K. Vydehi Assistant Professor

#### **Assistant Editors**

Mr.K. Manikanta (III B. Tech-20A91A0592)

Mr.M. Teja (III B. Tech-20A91A0539)

Ms.G. Sai Sree (IV B. Tech-19A91A0517)

Mr.G. Tarun Venkata Ramesh<sub>(IV B. Tech-19A91A0515)</sub>

Ms.V Sudheethi<sub>(IV B. Tech-19A91A0559)</sub>

Ms.Shaik Ayesha<sub>(IV B. Tech-19A91A0552)</sub>