INFO BYTE

VOLUME 3 ISSUE 1(JUN-NOV) 2019-2020

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ADITYA
ENLIGHTENS THE NESCIENCE

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

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

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

Good Luck

Principal's Message

Dr. M Sreeenivasa Reddy

"THE WHOLE PURPOSE OF EDUCATIION 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.

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 Activities

Tech Stories

June: When three becomes one

Facebook to reveal plans to merge the behind-the-scenes tech of messaging on WhatsApp, Messenger and Instagram.

July: Photo glitches

Facebook HQ prevented users being able to upload new photos and videos to its apps, and in some cases prevented existing ones being viewable. The disruption lasted for about nine hours.

August: iPhone booby traps

Apple's mobile devices face fewer serious cyber-security threats than Android-powered equivalents.This was not Apple's only Uighur-related controversy this year. The campaign group Sum of Us has repeatedly claimed that the firm's willingness to comply with a Chinese ban on virtual private network (VPN) apps has made it harder for civil rights defenders to safely discuss claims of abuses against the ethnic minority.

September: More cameras

The iPhone 11 range got more cameras, longer-lasting batteries and a new "pro" moniker for the top-of-the-range models. Market watchers have since reported the iPhones sold better than they expected - particularly in the US and Western Europe.

October: Jedi wars

Amazon - and many outsiders - thought it had the strongest bid for a high-profile contract to provide the Pentagon with cloud computing and artificial intelligence services. So there were shockwaves when Satya Nadella's Microsoft clinched the so-called Jedi deal instead. It could be worth as much as $10bn (£7.7bn) over time.

November: The eyes have it

TikTok was fairly obscure beyond its core teenage audience. These days it is one of the most talked about apps. It has launched one meme after another, and earned a reputation as being one of the most joyous places to be on the internet. But there are also concerns about it being Chinese-owned.

Collection by

SHAIK NAFI IZAAZ

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INNOVATION TRENDZ IN 2019

1. MACHINE LEARNING WILL ADVANCE ARTIFICIAL INTELLIGENCE (AI)

2. QUANTUM COMPUTING (SUPERCOMPUTING)

3. AUGMENTED REALITY (AR) AND VIRTUAL REALITY (VR)

4. GLOBAL INTERNET OF THINGS (IOT) SECURITY BREACH

5. BLOCKCHAIN TECHNOLOGY

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MALLIDI SATYA KOUSHIK
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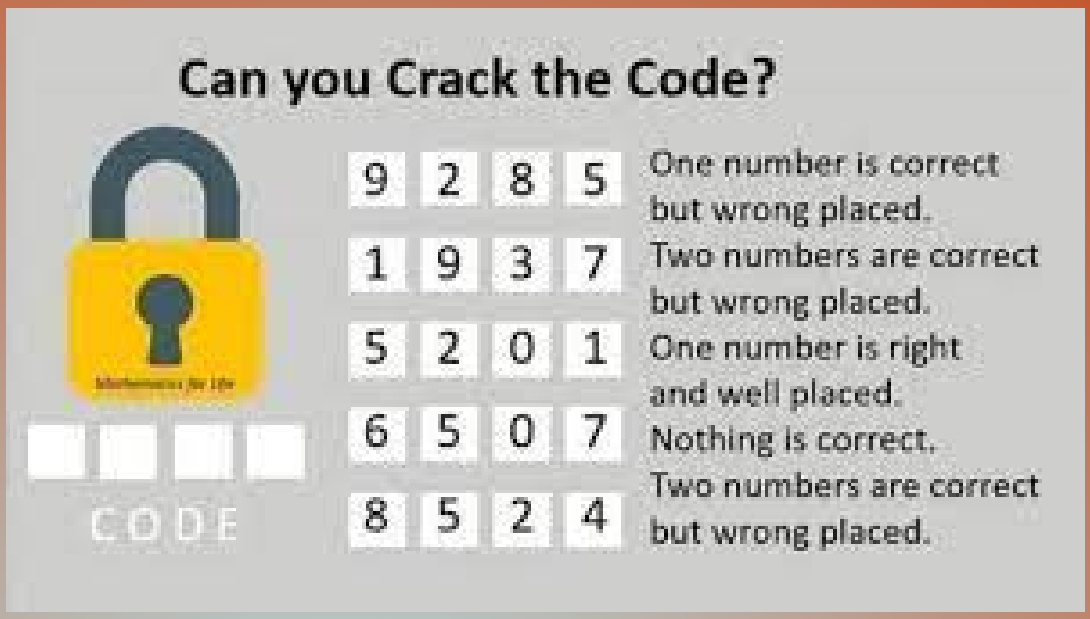
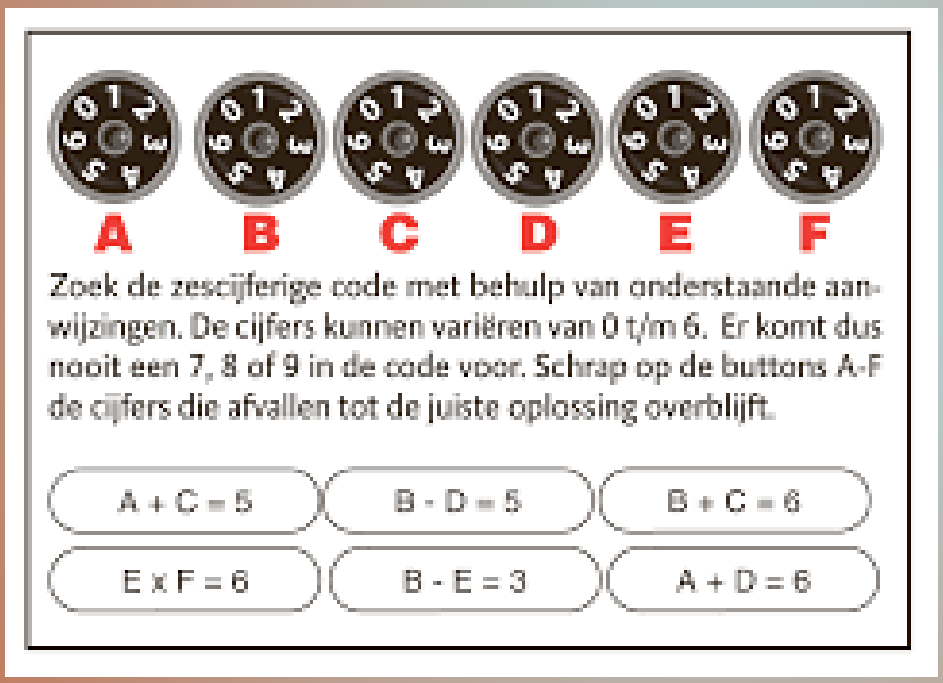
DE'CODE' IT!!!!





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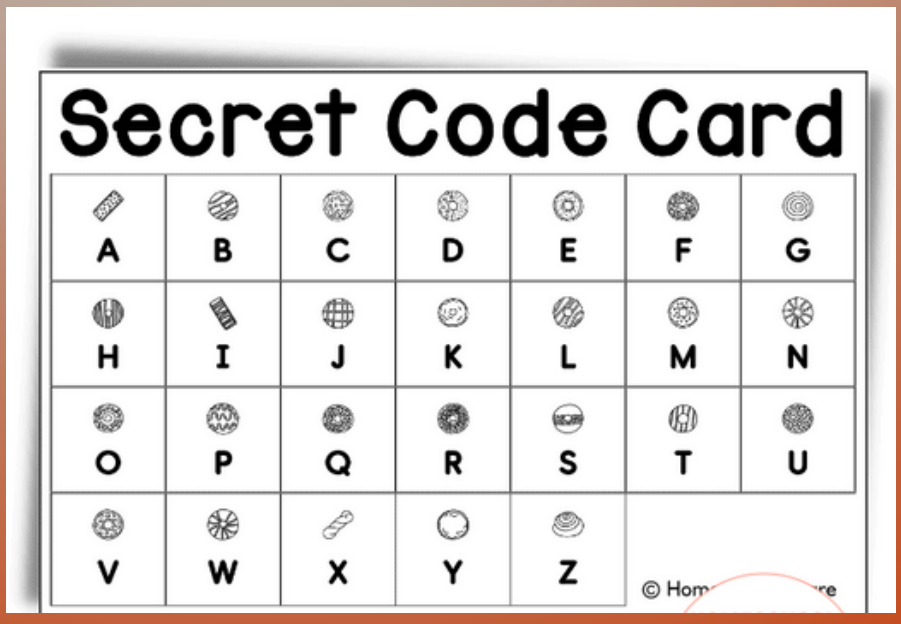

PENCIL DRAWINGS

NADELI LOKESH CHANDU
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GADE HARIKA
18A91A05C9

MANDALAPU PRASHANTH SAI

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YANAMANDRA SATYA KARTHIK

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TECHNICAL ARTICLES

supercomputing

Supercomputing technology comprises supercomputers, the fastest computers in the world. Supercomputers are made up of interconnects, I/O systems, memory and processor cores.

Unlike traditional computers, supercomputers use more than one central processing unit (CPU). These CPUs are grouped into compute nodes, comprising a processor or a group of processors—symmetric multiprocessing (SMP)—and a memory block. At scale, a supercomputer can contain tens of thousands of nodes. With interconnect communication capabilities, these nodes can collaborate on solving a specific problem. Nodes also use interconnects to communicate with I/O systems, like data storage and networking.

A matter to note, because of modern supercomputers' power consumption, data centers require cooling systems and suitable facilities to house it all.

Supercomputing and AI

Because supercomputers are often used to run artificial intelligence programs, supercomputing has become synonymous with AI. This regular use is because AI programs require high-performance computing that supercomputers offer. In other words, supercomputers can handle the types of workloads typically needed for AI applications.

GOWTHU SEKHAR
16A91A0577

Blockchain Technology

Blockchain is a method of recording information that makes it impossible or difficult for the system to be changed, hacked, or manipulated. A blockchain is a distributed ledger that duplicates and distributes transactions across the network of computers participating in the blockchain.

Blockchain technology is a structure that stores transactional records, also known as the block, of the public in several databases, known as the "chain," in a network connected through peer-to-peer nodes. Typically, this storage is referred to as a 'digital ledger.'

Every transaction in this ledger is authorized by the digital signature of the owner, which authenticates the transaction and safeguards it from tampering. Hence, the information the digital ledger contains is highly secure.

In simpler words, the digital ledger is like a Google spreadsheet shared among numerous computers in a network, in which, the transactional records are stored based on actual purchases.

A blockchain is a distributed, immutable, and decentralized ledger at its core that consists of a chain of blocks and each block contains a set of data. The blocks are linked together using cryptographic techniques and form a chronological chain of information.

CH MOUNIKA PRIYA
18A91A0568

Machine Learning

Machine learning (ML) is a type of artificial intelligence (AI) focused on building computer systems that learn from data. The broad range of techniques ML encompasses enables software applications to improve their performance over time.

Machine learning algorithms are trained to find relationships and patterns in data. They use historical data as input to make predictions, classify information, cluster data points, reduce dimensionality and even help generate new content, as demonstrated by new ML-fueled applications such as ChatGPT, Dall-E 2 and GitHub Copilot.

Machine learning is widely applicable across many industries. Recommendation engines, for example, are used by e-commerce, social media and news organizations to suggest content based on a customer's past behavior. Machine learning algorithms and machine vision are a critical component of self-driving cars, helping them navigate the roads safely. In healthcare, machine learning is used to diagnose and suggest treatment plans. Other common ML use cases include fraud detection, spam filtering, malware threat detection, predictive maintenance and business process automation.

While machine learning is a powerful tool for solving problems, improving business operations and automating tasks, it's also a complex and challenging technology, requiring deep expertise and significant resources.

ADIDILA MOUNIKA

17A91A0564

CODE POETRY

```
class _is{ static object Of, My, thought,
I;float in_memories, across,
The; long and; short the, warm, And, cold;
decimal excpression, of, my_world,

my; static void
Main(){thought = I; long _for;
_is hidden, in_the_past,
embedded, In, My;}class

As{long _as, memories, remain;
double will, the, pain,
and, no_one; _is to_blame(){
if(true); _is what, i, hail, _,

life; _ = new _is(); for (; ; ) { } return _;}}}
```


KADIMI SUBHASH
17A91A0523


```
#include <limits.h>
#define _ void
#include <time.h>
#define _ volatile
#include <string.h>
#define you main
_ you (){_ are_my_poetry;
_ you_make_me_smile;
_ and_sometimes_cry;}

// My Poetry
// For Justina
// © Audrius Kovalenko, 2018
```

```
include everything.*;
void wonder(Universe u) {
  while (ever || never) {
    for (Poem i in u.now()) {
      Word dust = u.speak(i);
      for (Moment mote in dust) {
        wonder(new Universe(mote));
      }
    }
  }
}
```

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