

VOLUME - 8



News Letter

June - 2k19

THE OFFICIAL NEWS LETTER OF THE DEPARTMENT OF CSE



USHA RAMA
COLLEGE OF ENGINEERING AND TECHNOLOGY

....ACHIEVED AUTONOMOUS STATUS

CYBER WARFARE



Cyber means relating to electronic communication networks and virtual reality whereas Warfare means engagement in or the activities involved in war or conflict. The term cyber warfare, actually a misnomer.

A number of definitions were proposed but not one single definition got widely adopted internationally. Some definitions are :

Richard A. Clarke defines it as "actions by a nation-state to penetrate another nation's computers or networks for the purposes of causing damage or disruption."

Martin Libicki defines two types of cyberwarfare: Strategic and operational, with strategic being "a campaign of cyberattacks one entity carries out on another", whilst operational cyberwarfare "involves the use of cyberattacks on the other side's military in the context of a physical war."

Other definitions include non-state actors, such as terrorist groups, companies, political or ideological extremist groups, terrorist hackers, and transnational criminal organizations.

One type of cyber warfare is hacking i.e. the concern of penetration testing . Penetration testing, also called pen testing or ethical hacking, is the practice of testing a computer system, network or web application to find security vulnerabilities that an attacker could exploit.

Threats :

cyber warfare can present a multitude of threats towards a nation . The "hard" side threats can be tampering with the operation of air defences via cyber means in order to facilitate an air attack and the "soft" side threats maybe like

Espionage

Sabotage

Denial-of -service attack

propaganda

Espionage :

The term Espionage means spying .Actually ,Espionage is not an act of war nor is cyber-espionage. It is said to be a traditional attack over a enemy . Spying is not limited only to governments but also to corporations too .

Sabotage :

The term Sabotage means destroying . The use of the internet to hinder the normal functioning of a computer system through the introduction of worms ,viruses or logic bombs , is referred to as computer sabotage.It is used to gain economic advantage over the competitor.

Denial-of-service attack :

A denial-of-service is an attempt to make a computer resource unavailable to its intended users.

propaganda :

The term Propaganda means Information or Advertising.It is an effort to control information in whatever form it takes and influence people.It is a form of psychological warfare, except it uses social media, fake news websites and other digital means.

Motivations :

Military

civil

Hacktivism

Private sector

Non-profit research

Regions :

Approximately 120 countries have been developing ways to use the internet as weapon and target marketing ,government computer system and utilites.Among 120 countries few regions are:

Asia - China , India , Korea,Sri lanka , Russia ,.....

Europe -Estonia , France,Germany , Netherlands ,.....

Middle East - Qatar, Saudi Arabia,Israel and Iran.

North America - US.

Defenses :

There are few defenses

Computer access control

Application security

Authentication

Authorization

Data-centric security

Encryption

Firewall etc.,.

Cyber attacks rain down on us from many places. You have to make your systems secure and safe and teach your people cyber hygiene. - Kersti Kaljulaid

KALLEM MOUNIKA

16NG1A0520

IV YEAR CSE-A

A Faculty Development Program (FDP) on Introduction to programming: A Pedagogical Approach was organized by the Department of Computer Science and Engineering , URCET in jointly organized by : Electronics & ICT Academics by the Electronics and Information Technology (MeitY), Government of India.



Resource Persons : Dr. Amey Karkare (IITK) and Prof Rajat Mittal

Experts Talk on :

- ◆ **Introduction to Programming and Methodology**
- ◆ **Branching**
- ◆ **Loops and Arrays**
- ◆ **Functions and Recursion**
- ◆ **Data structures, testing and Debugging**



THE WORLD OF PROGRAMMING

Acknowledgement:

The main objective of this series is to show why programming language exist? And to point out the link between programming, science and all the existence. In order to keep this series clean and simple, I solely concentrated on concepts, logics and avoided deep analysis of Mathematical formulas and such complex stuff. This series can only give you rough idea of every concept.

Index:

1: def Machines(Programming):

CHAPTER 1: defMachines(Programming):

Introduction:

Before going deep into this topic, let me warn you, “You are surrounded by machines”...From Switches on the walls to Fans, Air Conditioners, Vehicles and many more. **What exactly are they? How do they work? What happens to humans if machines don't exist?** I spent my childhood with those awesome questions.

In this paranoid world, statements like “**Advancement of machines leads to destruction of society**” and “**Artificial Intelligence brings hell to the Earth**” are commonly heard. We feel like something's happening but “**What those statements really mean?**”

Artificial Intelligence, Machine Learning, Deep Learning and Neural Networking. **How all these concepts are ruling the programming world?**

Well, in this chapter, let's find out the answers for these.

Diving in.

Machines are the most brilliant and wonderful creations of mankind. Let's go with, why we need machines? as a starter.

Suppose, you are dealing with complex calculations. It takes some time to solve them on your own. People surrounding you might help you out, but not in all cases. But we got a machine, **calculator** which is more reliable and a lot quicker. Similarly, during hot summer nights we evolved from enjoying normal breeze, bamboo leaves,

fans to most comfortable Air Conditioners.

So machines are invented to make life easier and comfortable for mankind. Machines are necessary to speedup the development in any area. But this happens only if man works along with machine to find new possibilities, instead of leaving work to machines and stay back. So, we need machines.

If you consider a machine as a human, processor in machine can be considered as human brain. Now, why exactly do we need programming? You might ask. Remember, mind controls the brain. Stronger mind gives better result and vice versa. This mind can be considered as program code. To be an easy-go, programming in machines is like giving a mind and purpose to machine. Now, mind and purpose, these two words play a major role in machine level programming. Let's talk about it in the end.

PROGRAMMING ON MACHINES

Many of you might heard about embedded programming. It's not any new from normal programming. If we can install a programmed code on a small chip which we can replace again, then it is embedded program. Generally, it will be like sequence of commands. This means, we give it a precise list of actions to perform task.

ARTIFICIAL MACHINES?

Well, while we are making machines, what exactly are these artificial machines? Let's go with a scenario. Let's us suppose you made a robot, which of course is a machine. Task assigned to it is to go to the market and buy you some vegetables. That kind of robot will be really awesome, right?Ok, back to scenario, now, let's suppose that you programmed it with route map, money, vegetable pictures, vegetable names and sent it out. What do you think will happened? Note these points, Roads won't be same all the time. There might be many new obstacles because of which our robot will be struck and might keep on running into the wall. Now, how can we solve it? Simple answer, let's give intelligence to the robot just like the humans have. Trust me, it will be very interesting. Now, how can we give it intelligence like humans have? What will you do, when you see a wall? Maybe you will try to climb it or go around it or maybe you will be finding your own route. That's how human intelligence work. If we can program such kind of logic, should do the work. But, how can it do that? To make it easier, let's go with, how can we humans do it? Let's go back in time and suppose you are 1 year old and this is the first time you are seeing a wall. What will you do? You will slowly walk towards it and will get hit by that and fall down. What will you do now? How many times will you get hit by that? 10times? 50times? But at some point, we will try to do something new, maybe climb that or look around for other way. We train ourselves over and over again to achieve something. We learn from our past experiences and we store them in our brains. Similarly, a robot is like a newly born human.

It doesn't have any experience to do any new stuff and it can't even store any of these. But if we can program it to store its experiences and train on them (like, if it achieved what it needs to do, let's say success and this action will be saved and will be performed everytime it faces that issue and If it fails to achieve the required function, let's say failure and it saves the failed experience and will train on it again and again until it gets success) then yeah, we gave it intelligence.

Now, a robot has to try a default action, then we get one of two outputs, i.e., either success or failure. It saves the input it has done and the output it get and has to train on those to get a clear idea what to do and take its own decisions at those critical times. This whole working, we can said as Artificial Intelligence. Now, in this whole process, we have a small part of training on old experiences, this is called Machine Learning.

To be clearer, let's go with another example of humans performing self-learning is, when i say, 1,2,3,4 and ask you what comes next, what will be your answer? 5, easy, right? Our mind can calculate it in less than millisecond. How are we making it to do that? First we divide the whole input 1,2,3,4 into sub inputs. Like, 1 gives 2, 2 gives 3, 3 gives 4 and what 4 gives? We got ourselves 3 sets of data to train. So, we will be training on those 3 sub questions and will try to apply the working logic on the last set, to get our answer. See, we self-trained. Similarly, if we can make machine, train on its own, that's Machine Learning.

Now back to mind and purpose, purpose is like writing a code to machine with sequence of actions and mind is a program code designed to make machine learn itself. The true ability of the machine can only be said based on the program code it was given.

To be continue..

G.Y.N.Satwik,
16NG1A0514,
IV CSE - A.

STUDENTS Achievements

Congratulations

గుడివాడ, న్యూస్టుడే :
రాష్ట్రస్థాయిలో వివిధ విశ్వవి
ద్యాలయాల్లో ఎంటెక్లో
ప్రవేశం కోసం నిర్వహించే
ఏపీ పీజీ ఈసెట్ ప్రవేశప
రీక్షల్లో ఆర్డీసీ కాలనీకి చెందిన ఆకుల నిత్య సహర్ష
ఆకుల శ్రీనివాస్ కుమార్తె నిత్యసహర్ష 34వ
ర్యాంక్ సాధించింది. కంప్యూటర్ సైన్స్ అండ్
ఇంజనీరింగ్ బీటెక్ను తేలప్రోలులోని ఉషా
రామ ఇంజనీరింగ్ కళాశాలలో చదివారు. క
ళాశాల సీఎస్ఈ విభాగాధిపతి సాంబశివ
రావు, తల్లిదండ్రుల ప్రోత్సాహం వల్ల మంచి
ర్యాంక్ లభించినట్లు ఆమె పేర్కొన్నారు.



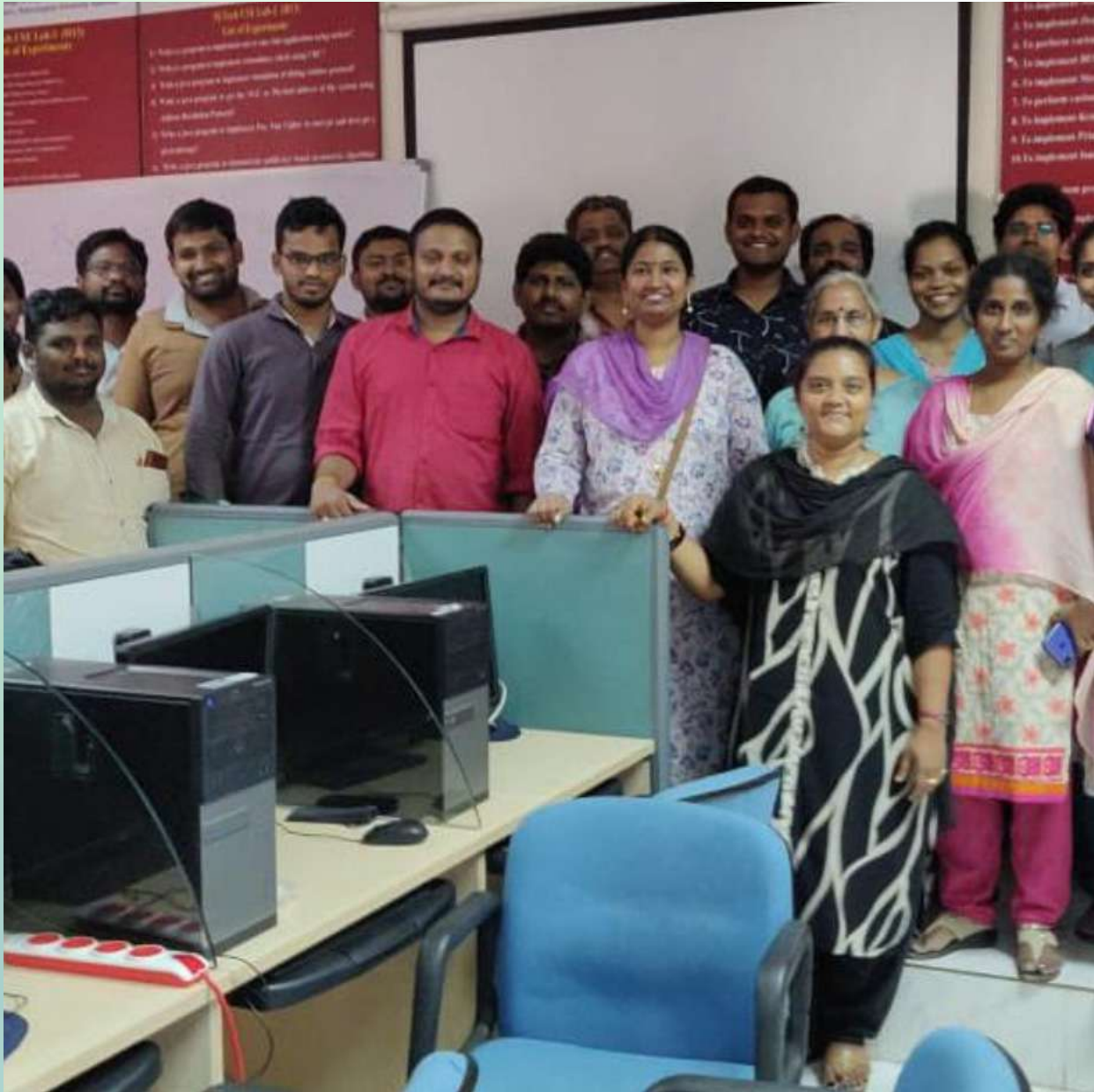
Results for AP PGECET - 2019

PGECEt Hallticket No	:	3232310060
Stream	:	CS - COMPUTER SCIENCE ENGINEERING
Candidate's Name	:	AKULA NITYA SAHARSHA
Father's Name	:	AKULA SRINIVASA RAO
Total	:	60
Rank	:	34

Print

Our final year CSE Student Miss **AKULA NITYA SAHARSHA** got "Rank 34" in AP PGECET - 2019

FACULTY Achievements



FACULTY DEVELOPMENT PROGRAM

Dr. K.P.N.V. Satya Sree has attended a one week Faculty development program on Machine Learning & Artificial Intelligence which was organised by JNTU Kakinada from May 1st to May 15th 2019.

AUTONOMOUS STATUS TO USHA RAMA ENGINEERING COLLEGE



The University Grants Commission (UGC) had accorded autonomous status to Usha Rama Engineering College, said the College Principal Dr GVKS Prasad here on Saturday.

Vijayawada: The University Grants Commission (UGC) had accorded autonomous status to Usha Rama Engineering College, said the College Principal Dr GVKS Prasad here on Saturday. College Chairman Sunkara Rambrahmam, correspondent Sunkara Anil, vice-chairman Lanka Arun appreciated the faculty, and director Dr K Rajashekar Rao for their contribution in getting the autonomous status to the college.

The principal said by receiving autonomous status, the college can take decision in preparing syllabus, course and exam under the guidance of the UGC. As per the prevailing situation, the college can include subject with industrial connect to create employment to students after completing the course, he said. He further said the college was established in 2008 and in 2013, the college received ISO certification, in 2016, NAC A Grade and received JNTU-K permanent accreditation.

II Sem

FINAL YEAR

Total Students	:	109
Passed	:	98
Pass %	:	90

III YEAR

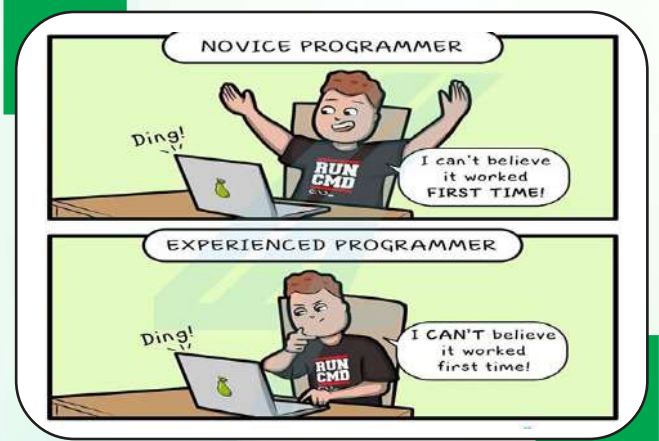
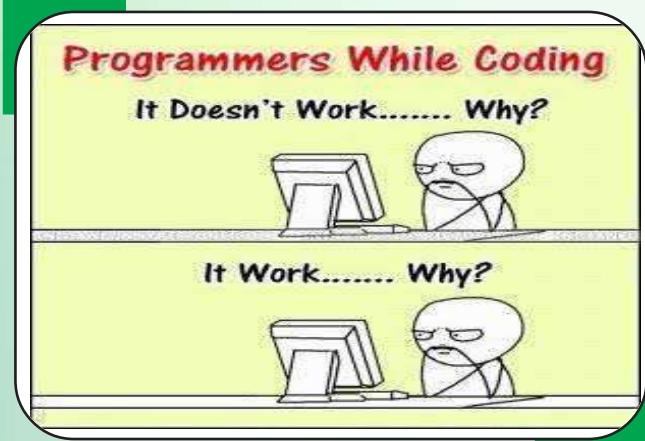
Total Students	:	108
Passed	:	87
Pass %	:	77.77

II YEAR

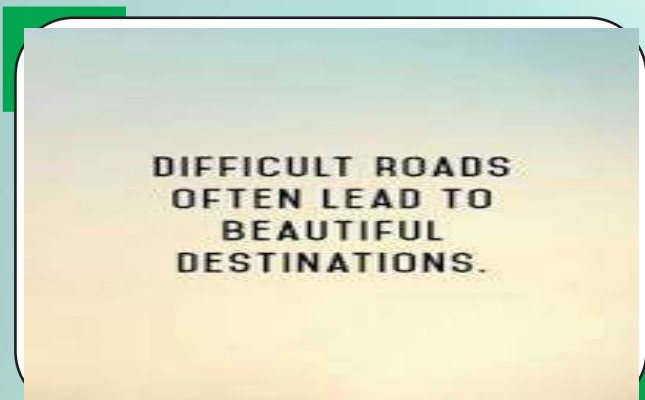
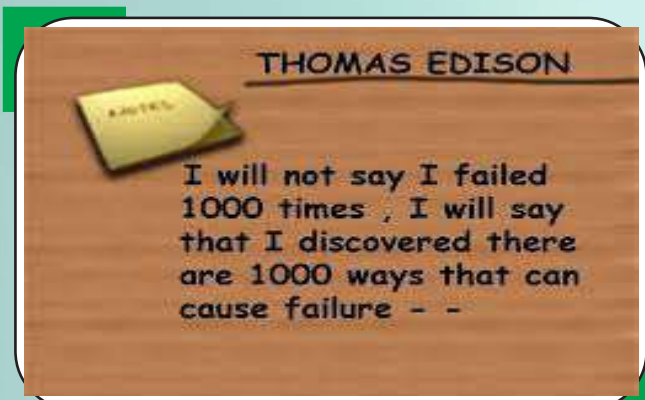
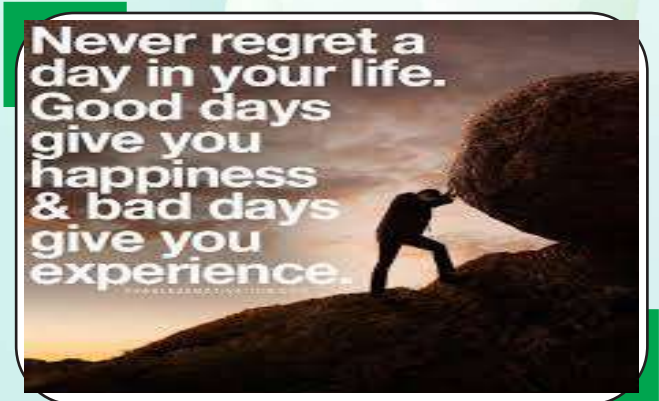
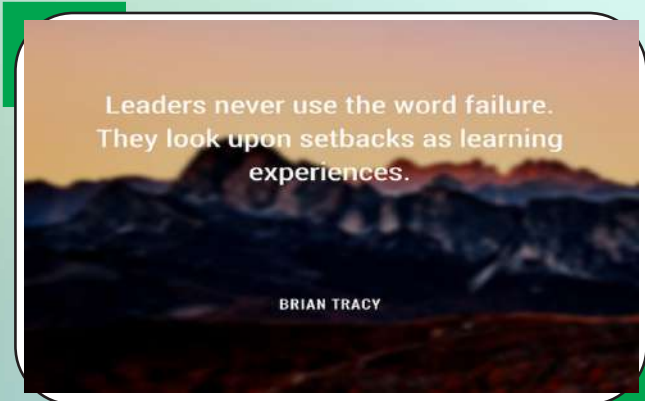
Total Students	:	113
Passed	:	41
Pass %	:	36.2

Technical Jokes

Glimpse



Inspirational Quotes





Executive Members :

- | | | |
|------------------------------|---|---|
| Mr. B.S. VARA PRASAD | - | "Editor-in-Chief"
Assistant Professor of CSE Department |
| Ms. V. RASHMI | - | "Associate Editor"
Assistant Professor of CSE Department |
| Mrs. S. ASWINI | - | "Manuscript Editor"
Assistant Professor of CSE Department |
| Mr. M. SAMBA SIVA RAO | - | "Technical Editor"
Associate Professor of CSE Department |

Student Representatives :

- | | | |
|--------------------------------|---|----------------------|
| D. Jessy Mercedes | - | III - CSE - A |
| L. Om Sai Prakash Varma | - | III - CSE - A |
| D. Omkar Sai Prasad | - | III - CSE - B |
| Md. Farook | - | II - CSE - A |
| G. Gowri | - | II - CSE - A |
| M.S.S. Kiran | - | II - CSE - B |
| G. Sahithi Priya | - | II - CSE - B |

*Push yourself, Because no one else
is going to do it for you.*

USHARAMA
COLLEGE OF ENGINEERING AND TECHNOLOGY