GUDLAVALLERU ENGINEERING COLLEGE

(An Autonomous Institute with Permanent Affiliation to JNTUK)

Seshadri Rao Knowledge Village :: Gudlavalleru

Department of Computer Science and Engineering

Workshop on
"Internet Architecture and its recent trends"

GUDLAVALLERU ENGINEERING COLLEGE
(An Autonomous Institute with Permanent Affiliation to JNTUK, Kakinada)
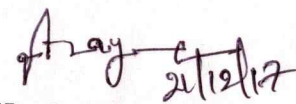Seshadri Rao Knowledge Village :: Gudlavalleru

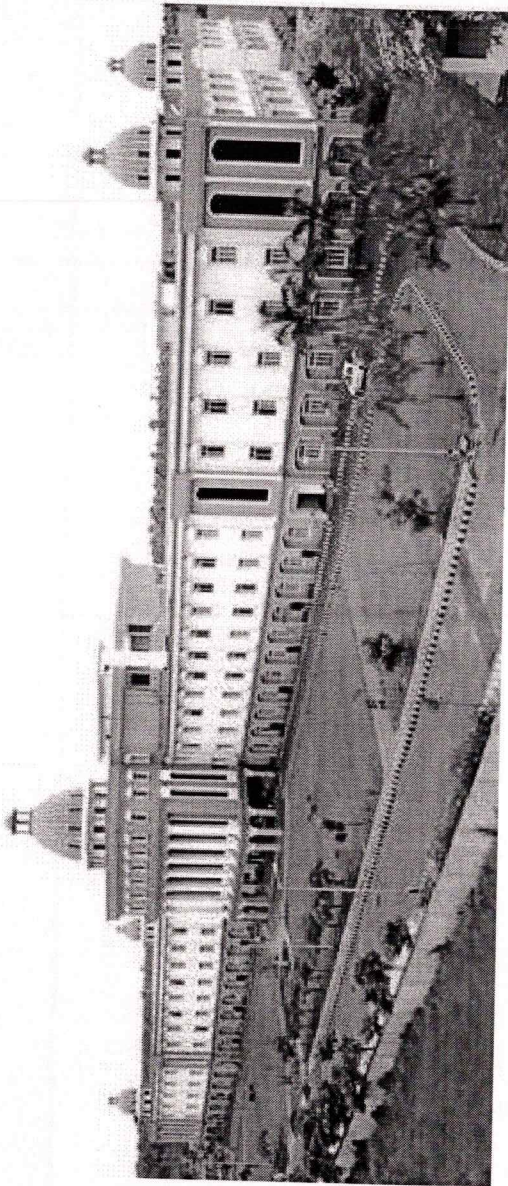## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Date: 21-12-2017.

NOTICE

All the III B.Tech CSE students are here by informed that a *One Day Workshop* on **"Internet Architecture and Its Recent Trends"** will be conducted by RAKESH VARUDU S/W. Engineer In Cisco Systems On **28th December 2017** in OS&SP Lab. So, the interested students can register for this workshop through the coordinator U.Ganeshnaidu, Asst.Professor of CSE. The last date for registration is 23rd December 2017.

Coordinator

21/12/17

Head of the Dept.

Copy To : Notice Board / Class room circulation / Staff circular file / Coordinator File

INVITATION

Department of
Computer Science and Engineering

Cordially invites you
To

One-Day SDP
On

Internet Architecture and Its Recent Trends

28th December 2017

Organized by
Department of Computer Science & Engineering
(Accreditated for 5 years by NBA)
GUDLAVALLERU ENGINEERING COLLEGE
(An Autonomous Institute with Permanent Affiliation to JNTUK, Kakinada)
Seshadri Rao Knowledge Village,
GUDLAVALLERU-521356, Krishna District,
Andhra Pradesh

ABOUT GEC

Gudlavalleru Engineering College is the vision of late Sri Vallurupalli Venkata Rama Seshadri Rao, the man behind the college. It was started in the year 1998 by the AANM & VVRSR Educational Society with an intake of 180 students, 40 each in EEE, ECE and CSE branches and 60 in ME branch. The college is situated at Gudlavalleru village and is surrounded by lush green fields providing serene learning environment. Gudlavalleru is 12 Km from Gudivada, 22 Km from Machilipatnam and 58 Km from Vijayawada. The nearest airport is Gannavaram (Vijayawada) 45 Km. It also offers PG programs in M.Tech, and MBA. The college is an Autonomous Institute Affiliated to JNTUK, Kakinada and approved by AICTE. The institution is continuously striving for excellence by adopting changes to improve the systems, practices and performance. The U.G Engineering programmes, EEE, ME, ECE, CE, CSE & IT have been accorded Accreditation status by NBA of AICTE.

Our Philosophy

- We hold ourselves to the highest standards in all our academic endeavors.
- We adhere to high standards of integrity, honesty and ethics in our pursuits.
- We nurture creativity and talent.
- We provide an atmosphere of mutual respect and compassion.
- We serve the society.

ABOUT CSE DEPARTMENT

The Department of Computer Science and Engineering is one of the pioneer departments of GEC with an intake of 240. The students of this department are being selected through campus recruitment in reputed IT companies. Besides the teaching learning process, CSE department regularly conducts workshops, guest lectures, group discussions and refresher courses to enhance the skills of students and teaching community. It is continuously striving to impart quality education and competitive spirit to students for academic excellence. The continual University ranks, high GATE scores and placement of students in various software organizations in and around the country reflect the performance of the department.

One-Day SDP
On

Internet Architecture and Its Recent Trends
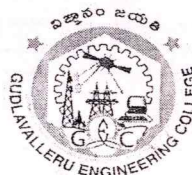
28th December 2017

Organized by
Department of Computer Science & Engineering
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GUDLAVALLERU ENGINEERING COLLEGE
(An Autonomous Institute Affiliated to JNTUK, Kakinada)
Seshadri Rao Knowledge Village::Gudlavalleru
Krishna Dt. PIN: 521356, AP.

Phone: 08674-273737, 273888
Fax: 08674-273957
E-Mail: csegec@gmail.com
Website: www.gecgudlavalleu.ac.in

College Officials

Dr. Nageswara Rao Vallurupalli
Chairman

Er. Satyanarayana Rao Vallurupalli
Secretary& Correspondent

Sri. Ramakrishana Vallurupalli
Co- Secretary & Correspondent

Principal: Dr. P. Ravindrababu

ADVISORY COMMITTEE

Dr. G.V.S.N.R.V Prasad Dean & Academic affairs
Dr. M. Babu Rao Academic coordinator, CSE

CHAIRMAN:

Dr.S.Narayana, Professor& HOD, CSE

COORDINATOR:

Sri. U.Ganesh Naidu - Asst. Prof.,CSE

MEMBERS:

Students of III CSE Department.

ABOUT THE WORKSHOP

Research areas that could be seen as components of a future Internet include network management, network virtualization, and treating any kind of information as objects, independent of their storage or location.While the technical development of the Internet was an extensive research topic from the beginning, an increased public awareness of several critical shortcomings in terms of performance, reliability, scalability, security and many other categories including societal, economical and business aspects, led to future Internet research efforts. The time horizon of future Internet studies is typically long term, taking several years before significant deployments take place.

Course Contents

* Networking Basics
* Hands-on on some linux networking tools.
* Legacy Networks vs Software Defined Networking ?
* How does this shift help the enterprises ?
* Have you ever imagined why were we able to access the content on Facebook, google, Netflix and other internet giants very fast ?

Resource Person:
RAKESH VARUDU,
S/W. Engineer,
Cisco Systems,Bangalore.

Registration Form

One-Day SDP On

Internet Architecture and Its Recent Trends

28th December 2017

Name of the Student

....

....

College Name...

....

Address for Correspondence

....

....

....

Ph.No: ....

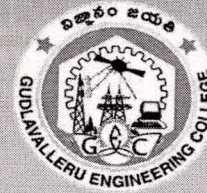E-mail: ....

Signature of Applicant   Signature of Coordinator

Place:
Date:

One Day workshop on

Internet Architecture and its Recent Trends

28th December 2017

by

RAKESH VARUDU

S/W. Engineer in CISCO SYSTEMS ,Bangalore.

Organized by

Department of Computer Science and Engineering

In Association with CSI

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(An Autonomous Institute with Permanent Affiliation to JNTUK, Kakinada)
Seshadri Rao Knowledge Village, GUDLAVALLERU-521 356
Krishna District, Andhra Pradesh
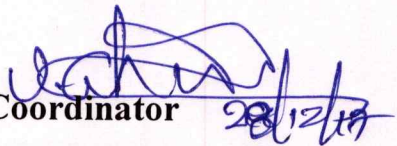
Key note address by resource person

Ensure that the Internet is a trusted medium of communication that provides a solid technical foundation for privacy and security, especially in light of pervasive surveillance, Establish the technical direction for an Internet that will enable billions more people to connect, support the vision for an Internet of Things, and allow mobile networks to flourish, while keeping the core capabilities that have been a foundation of the Internet's success, and Promote the technical evolution of an open Internet without special controls, especially those which hinder trust in the network.

Basic concepts of Networking, i.e., Why IP addressing when we have Mac Addresses? What happens during switching? What happens during routing? - How routing protocols work? TCP and how does it affect application performance? TCP or UDP - When to use what ? What does Google use ? How does Arp work? How does ping work? How does trace route work ? some Linux networking tools. Legacy Networks vs. Software Defined Networking? How does this shift help the enterprises ?Have you ever imagined why were we able to access the content on Face book, Google, Netflix and other internet giants very fast ?Networking Lab on SDN: Some basic hands-on on controller to software switch communication.

A media access control address (MAC address) of a device is a unique identifier assigned to network interfaces for communications at the data link layer of a network segment. MAC addresses are used as a network address for most IEEE 802 network technologies, including Ethernet and Wi-Fi. Logically, MAC addresses are used in the media access control protocol sublayer of the OSI reference model.

MAC addresses are most often assigned by the manufacturer of a network interface controller (NIC) and are stored in its hardware, such as the card's read-only memory or some other firmware mechanism. If assigned by the manufacturer, a MAC address usually encodes the manufacturer's registered identification number and may be referred to as the burned-in address (BIA). It may also be known as an Ethernet hardware address (EHA), hardware address or *physical address* (not to be confused with a memory physical address). This can be contrasted to a programmed address, where the host device issues commands to the NIC to use an arbitrary address.

A network node may have multiple NICs and each NIC must have a unique MAC address. Sophisticated network equipment such as a multilayer switch or router may require one or more permanently assigned MAC addresses.

Coordinator 28/12/17

[U.GANESH NAIDU]

ORGANIZING COMMITTEE

Chief Patrons:

Dr. Nageswara Rao Vallurupalli — Chairman
Er. Satyanarayana Rao Vallurupalli — Secretary & Correspondent
Sri. Ramakrishna Vallurupalli — Co-Secretary & Correspondent

Patrons:

Dr. S.R.K. Reddy — Director
Dr. P. Ravindrababu — Principal
Er. Ch. Venkatramanna — Registrar

Co-ordinator:

Sri. U.Ganesh Naidu — Asst. Prof., Department of CSE

ADVISORY COMMITTEE

Dr. G.V.S.N.R.V Prasad Dean & Academic affairs
Dr.S.Narayana, Professor& HOD, CSE
Dr. M. Babu Rao Academic coordinator, CSE
Mr.K. Suresh Babu Assoc. Prof., Department of CSE
Mr.G.Vijay deep Assoc. Prof., Department of CSE

*************** PROGRAM SCHEDULE ***********

9:00A.M.: Inaugaration

Session-1:
9:45 to 11:00 - 1 hr 15 mins
Networking Basics
Why IP addressing when we have Mac Addresses ?
What happens during switching ?
What happens during routing ? - How routing protocols work ?
TCP and how does it affect application performance ?
TCP or UDP - When to use what ? What does google use ?

Break: 11:00 to 11:15 -10 mins + 5 mins for settling up.

Session - 2 - Hands-on on some linux networking tools.
11:15 - 12:30 - 1 hr 15 mins
How does Arp work ?
How does ping work ?
How does trace route work ?
Let's try some linux networking tools.

Lunch: 12:30 - 1:30 - 1 hour.

Session-3:
1:30 - 2:30 - Session-3 -> 1 hour.
Legacy Networks vs Software Defined Networking ? How does this shift help the enterprises ?
Have you ever imagined why were we able to access the content on Facebook, google, Netflix and other internet giants very fast ?

Break:
2:30 to 2:45 - 10 mins + 5 mins for settling up.

Session-4:
2:45 - 4:00 - Session-4 -> 1 hr 15 mins
Networking Lab on SDN:
Some basic hands-on on controller to software switch communication
If any time is left, it is for Open Discussion and clarifications.

4:00P.M.: Validectory

***************** VENUE *******************

OS&SP lab(Beside computer center)

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Seshadri Rao Knowledge Village,Gudlavalleru-521356

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Internet Architecture and Its Recent Trends(2017-18)

ATTENDANCE SHEET

S.No	Roll No	28/12/2017	
		FN	AN
1	15481A0509	A. Bhargavi Sai	A. Bhargavi Sai
2	15481A0511	A. Harshitha Sai	A. Harshitha Sai
3	15481A0514	B. L.prasanna	B. L.prasanna
4	15481A0519	B. Vishnu priya	B. Vishnu priya
5	15481A0520	B. A. Pranitha	B. A. Pranitha
6	15481A0523	Bhargav.k	Bhargav.k
	15481A0528	B. Sri Pavan Kumar	B. Sri Pavan Kumar
8	15481A0530	Mukesh	Mukesh
9	15481A0535	Chandu Priya. J	Chandu Priya. J
10	15481A0544	D.Swathi	D. Swathi
11	15481A0565	G. Sai jaswanth	G. Sai jaswanth
12	15481A0568	G. Kaveri	G. Kaveri
13	15481A0573	G.Swaroop	G. Swaroop
14	15481A0577	M-Sai Kumar	M. Sai Kumar
15	15481A0580	K.Visishta	K.Visishta
16	15481A0585	K. Tejaswini	K. Tejaswini
17	15481A0590	Kumar	Kumar
18	15481A0591	Katta Sarath Teja	Katta Sarath Teja
19	15481A0598	K. V. Suresh Babu	K. V. Suresh Babu
20	15481A05B7	M. Harika	M. Harika
21	15481A05B9	Swathi	Swathi
22	15481A05D8	Tanuja Kalyani.M	Tanuja Kalyani.M
23	15481A05D9	M. Srilekha	M. Srilekha
24	15481A05F7	N. Lakshmi Pravallika	N. Lakshmi Pravallika
25	15481A05G2	P. Greesi 28/12/17	P. Gree 28/12/17
26	15481A05G3	P. Sunayana	P. Sunayana
27	15481A05G7	P. Lavanya	P. Lavanya

Coordinator

GUDLAVALLERU ENGINEERING COLLEGE

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Seshadri Rao Knowledge Village,Gudlavalleru-521356

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Internet Architecture and Its Recent Trends(2017-18)

ATTENDANCE SHEET

S.No	Roll No	28/12/2017	
		FN	AN
28	15481A05H3	P. Venkat	P. Venkat
29 •	15481A05H6	P. Atitha	P. Atitha
30	15481A05I1	P. Bhargavi	P. Bhargavi
31	15481A05C8	M. Divya Bharathi	M. Divya Bharathi
32	15481A05I6	P. L. Gayathri Devi	P. L. Gayathri Devi
33	15481A05I7	P. Dedeepya	P. Dedeepya
34	15481A05I9	P. Sai Priya	P. Sai Priya
35	15481A05K2	S. Umasri	S. Umasri
36	15481A05L1	S. Sirisha	S. Sirisha
37	15481A05L3	S. Niharika	S. Niharika
38	15481A05L8	T. Meghana	T. Meghana.
39 •	15481A05M5	Pragnavss	Pragnavss
40	16485A0530	G. Jayasri	G. Jayasri
41 •	16485A0535	Svlagamma.	Svlagamma.

Co-ordiantor

Head of the Department
Computer Science & Engineering
Gudlavalleru Engineering College
GUDLAVALLERU - 521 356

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Certificate of Participation

This is to Certify that Mr/Ms. _P. Dedeepya_ of
CSE department has participated in One Day Workshop on *Internet Architecture and its Recent Trends* organized by Department of Computer Science and Engineering on 28th December 2017.
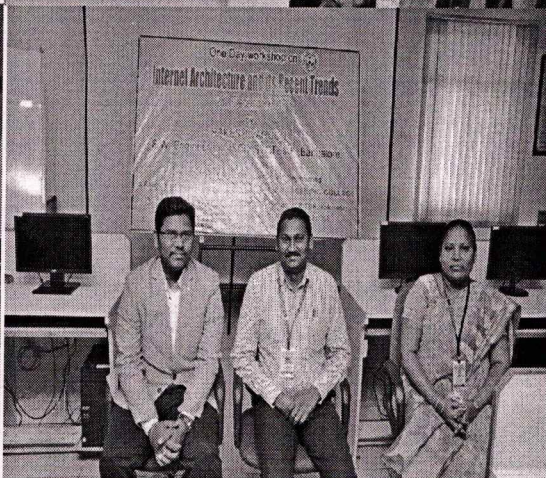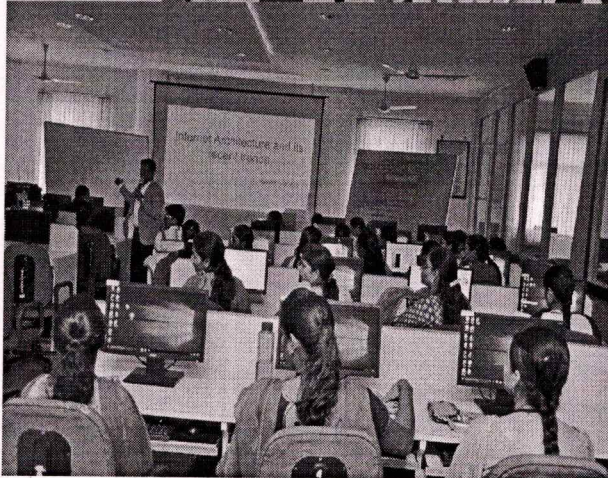
U. Ganesh Naidu
(Coordinator)

Dr. S. Narayana
(Convener & HoD)

Dr. P. Ravindrababu
(Principal)

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Seshadri Rao Knowledge Village,Gudlavalleru-521356.

Certificate of Participation

This is to Certify that Mr/Ms. ___S. Uma Sai___ of CSE department has participated in One Day Workshop on *Internet Architecture and its Recent Trends* organized by Department of Computer Science and Engineering on 28th December 2017.
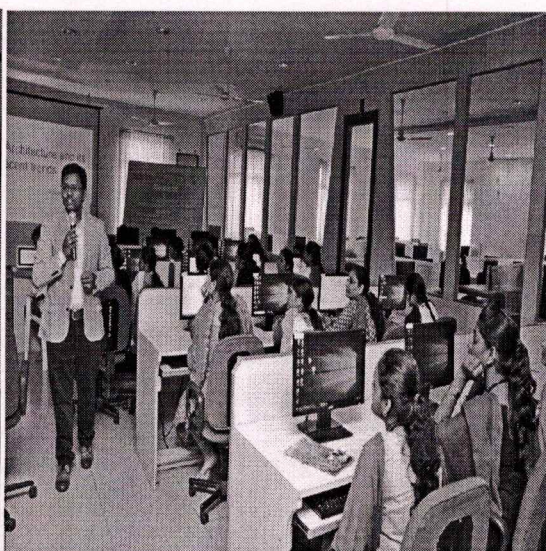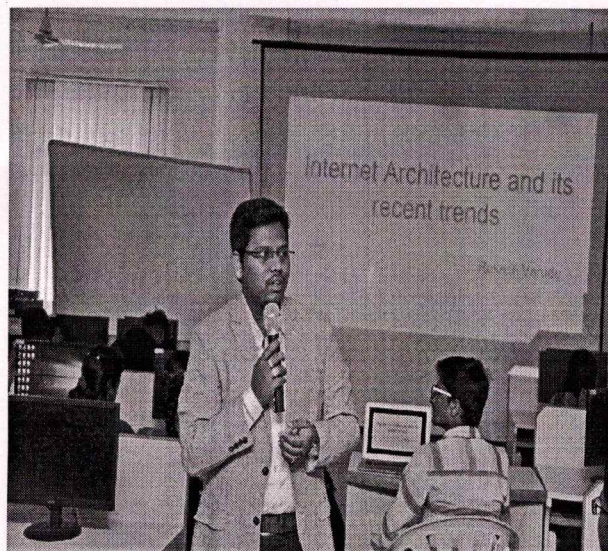
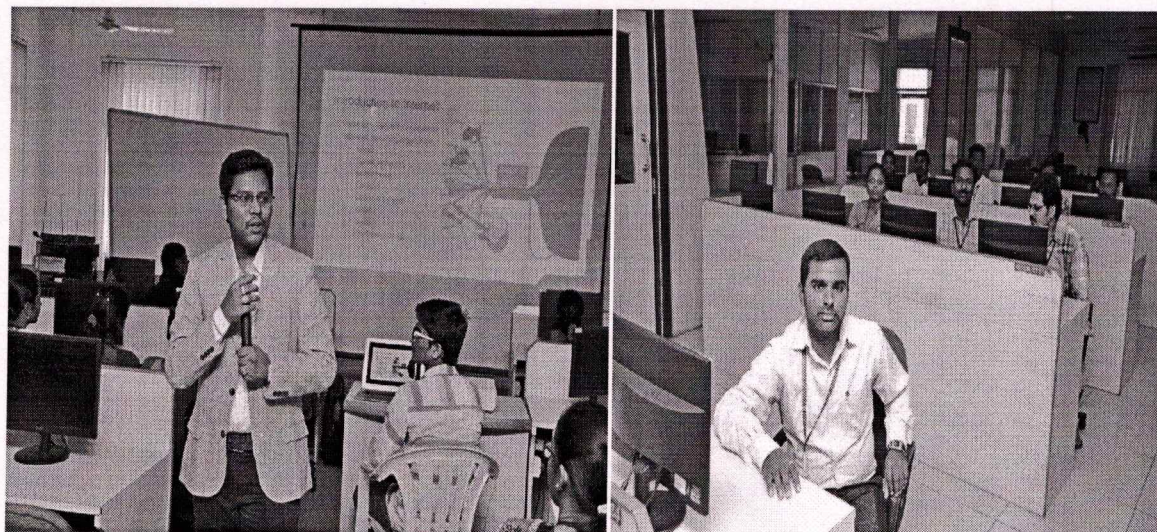**U. Ganesh Naidu**
(Coordinator)

Dr. S. Narayana
(Convener & HoD)

Dr. P. Ravindrababu
(Principal)

Workshop on **Internet Architecture and Its Recent Trends**

A one Day Workshop on **Internet Architecture and its Recent Trends** was conducted on 28th December, 2017, in association with GEC CSI Student Branch, in Department of computer Science and Engineering in **Gudlavalleru Engineering College**. **RAKESH VARUDU**,S/W engineer, Cisco Systems, Bangalore attended to train the students. In this workshop, they covered Basic concepts of Networking, i.e., **Why IP addressing when we have Mac Addresses? What happens during switching? What happens during routing? - How routing protocols work? TCP and how does it affect application performance? TCP or UDP - When to use what ? What does Google use ? How does Arp work? How does ping work?How does trace route work ? some Linux networking tools. Legacy Networks vs. Software Defined Networking? How does this shift help the enterprises ?Have you ever imagined why were we able to access the content on Face book, Google, Netflix and other internet giants very fast ?Networking Lab on SDN: Some basic hands-on on controller to software switch communication.**

Mr. U. Ganesh Naidu Asst. Professor act as coordinator for this event. Totally 41 students were benefited from this workshop. All were appreciated him for his excellence presentation. The session conducted by him very interactively. students clarified their doubts regarding real-time working on network tools. Finally the Workshop completed successfully.

AY. 17-18 (3)