A Report

GTU
Sponsored
ISTE approved
FDP IN
ASSOCIATIO
N WITH
V.V.P.
ENGINEERI
NG
COLLEGE,
RAJKOT

DEPARTMENT of COMPUTER
ENGINEERING ORGANIZES GTU
Sponsored ISTE approved FDP on

"A Step Towards Contribution to Sustainable Skill to Empowering Youth in Large Scale Networks using Network Simulators NS3 and NetSim"

DURING 25th Nov'19 TO 30th Nov'19









About FDP – "NS3 and NetSim":

Ns-3 is a discrete-event network simulator for internet systems, targeted primarily for research and education. NetSim is an end to end, full stack packet level network simulator and emulator. It provides network engineers with a technology development environment for protocol modeling, network R&D and military communication.

The FDP is

- To give you knowledge about two well known network simulators in the industry ns-3 and NetSim
- This topic is chosen because in today's field of IoT, for simulation of wireless protocol, routing protocol contiki operating system plays an important role. And ns-3 is used for simulation of all type of computer network like wireless computer network, wireless sensor network, personal area network which can be programmed using python and c++. So it's very much useful

Organizers:

Chief Patron Shri Lalitbhai Mehta, Managing Trustee

Patron Dr. Jayesh Deshkar (Principal)

Conveners (1) Dr. Tejas Patalia (HOD CE)

(2) Dr. Kamal Sutaria (Asst. Prof. CE dept.)

Technical Experts:

- Key Note Dr. Mayur Vegad (Professor, BVM , Vallabhvidhyanagar)
- Technical Expert 1 Prof. Jignesh Patoliya (CHARUSAT)
- Technical Expert 2 Dr. Ritesh Patel (CHARUSAT)
- Technical Expert 3 Dr. Mohit Tahiliani (NITK Surathkal, Mangalore)

Day 1 | 25th November 2019 :

Inauguration Function:

The FDP was inaugurated with Prayer, Deep Pragtya followed by speech of convener and co-convener to welcome Experts and Participants.







Dias : Convener, Guest and Expert : From left Convener Dr. T.P. Pataliaya (HOD CE, vvpec), Mr. Jignesh Nandani (Asst. Prof. CHARUSAT - Expert Day 1/2/3), Key Note Speaker Dr. Mayur Vegad (Professor, BVM, Vallabhvidhyanagar)



Participants: Total 32 participants – (08 staff members from other colleges, 15 vvp staff members, 01 Student from Other College and 08 v.v.p. students)

Key Note Session:





Sir has started giving introduction of NS3. Also he has given installation process of NS3. Then after sir has given glims of ns3 simulation programme with C++ script.

Day 2 | 26th November 2019:



Expert: Prof. Jignesh Patoliya is pursuing his PhD in area of Embedded Systems & IoT. He is presently serving as an Assistant Professor in the department of EC engineering at the Charotar University of Science and Technology Changa since Jan. 2009. He has conducted more than 65 workshops in the area of Microcontrollers, ARM, Arduino, VLSI design, PCB design, Embedded C, Arduino C, Python programming, Visual Programming, Raspberry Pi & Internet of Things.

Prof. Jignesh Patoliya Asst. Prof. EC dept., (CHARUSAT)

He has guided 10+ PG Students. He has also guided more than 70 UG level projects. He has published 25 research papers in national & international journals/conference. He secured Tally Innovation award in JED-I project challenge in 2013 held at IISC Bangalore.



Sir has started his first session with introduction of IOT and its trends in next generation internet than also covers CONTIKI os and COOJA Simulator in depth.





Respected Principal Dr. Jayesh Deshkar sir has deliverd a value added session on Universal Human Values for the participants of FDP.



Second session was related to installation of Contiki OS and implementation of program in contiki OS with cooja simulator. He has also explained basic structure of contiki os and how to implement real world problem on to this.

Day 3 | 27th November 2019:



Sir has given fundamental knowledge about networking and ns3 simulator. He has given introduction about miniNet.





Day 4 | 28th November 2019:







On the second day he explain detail about NS3 and structure of NS3.

Day 5 | 29th November 2019:



Dr. Mohit has given motivation about research and current trends in networking. Then he started explaining about ns3 research scope and his career in ns2 and ns3. He has also explain the way he has started his journey of research in NS2 and NS3. He said that you start with very small thing, a small contribution to open source community, a small change or contribution may help someone in his research.

Day 6 | 30th November 2019:

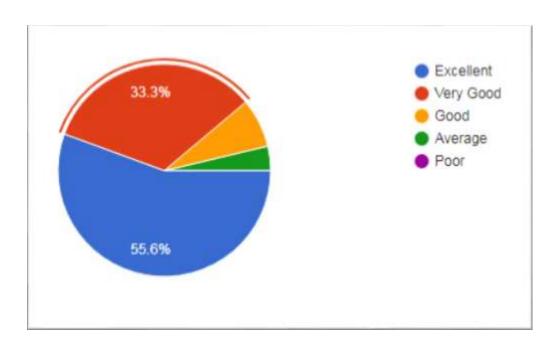


On the next day he has explained total structure of ns3. He has also explained the real world scenario related networking. He has also discussed a lot in details for WI-Fi module in NS3 and few algorithms which were coded by their team in NS3.

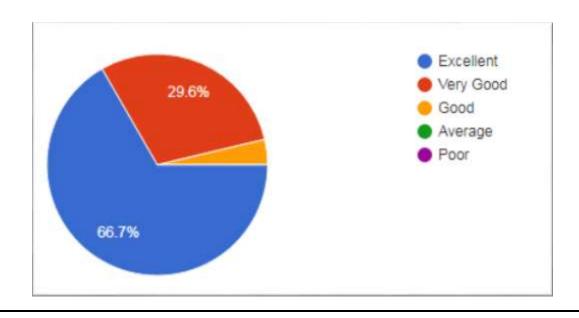
Feedback Form Analysis of FDP for

Technical content, co-ordination and hospitality during FDP

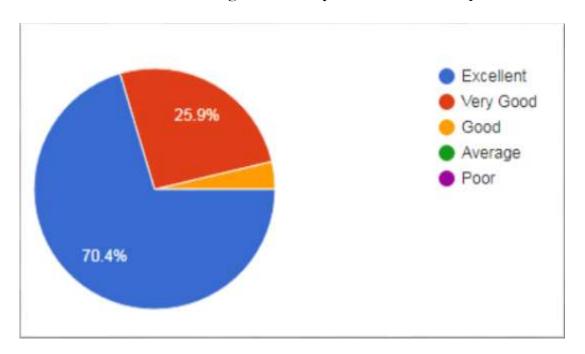
Does Dr. Mayur Vegad is best for the topics?



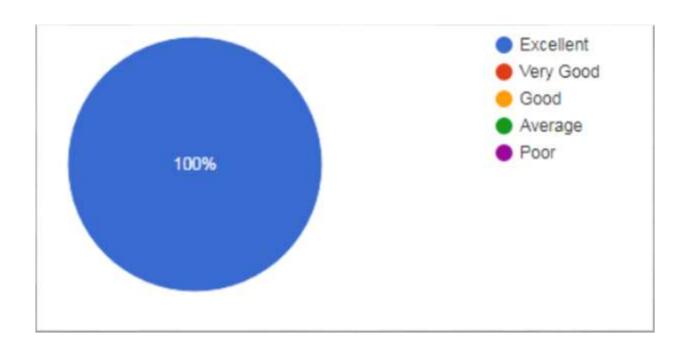
Does Dr. Ritesh Patel is best for the topics?



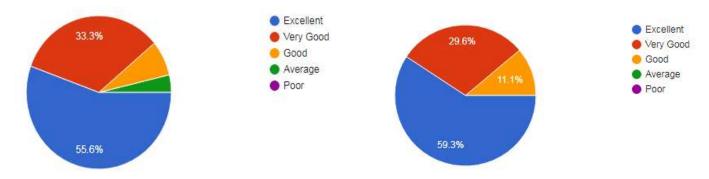
Does Prof. Jignesh Patoliya is best for the topics?



Does Dr. Mohit Tahiliani is best for the topics?

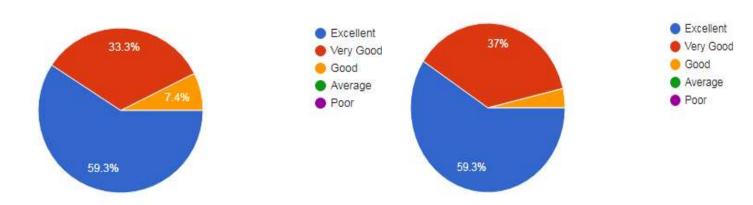


Rating for Day wise topics



Day-1 Topics Covered By Dr. Mayur Vegad Sir

Day-2 Topics Covered By Mr. Jignesh Patoliya Sir



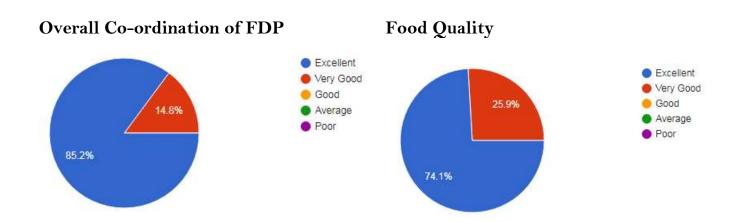
Day-3 Topics Covered By Dr. Ritesh Patel Sir

Day-4 Topics Covered By Dr. Ritesh Patel Sir



Day-5 Topics Covered By Dr. Mohit P. Tahiliani Sir

Day-6 Topics Covered By Dr. Mohit P. Tahiliani Sir



✓ Certificate Distribution for Participants







Certificate Distribution Ceremony

Media Coverage:

The FDP details were largely covered in Rajkot daily newspapers.





વીવીપી કોલેજમાં કેકલ્ટી ડેવલપમેન્ટ કાર્યક્રમ



શૈ.વી.ધી ઈજનેરી કોલેજના કમ્પ્યુટર વિભાગ દ્વારા જીટીયુ તથા આઈ. ટી. । ના સહયોગથી કેકલ્ટી ડેવલપમેન્ટ પ્રોગામનું આયોજન કરાયું હતું. જેમાં મેનએસ 3 અને નેટસીમ જેવા વિષયોને આવરી લેવામાં આવ્યા હતા.

વીવીપી કોલેજ ખાતે કમ્પ્યુટર વિભાગ દ્વારા ફેકલ્ટી કેવલપમેન્ટ પ્રોગ્રામ ચોજાચો

ઉપસ્થિત મहેમાનોએ એનએસ-3 અને નેટસીમ જેવા વિષયો પર માહિતી આપી

41.41.41. કેલેજનાં તમ્પ્યુટર વિભાગ હારા 8.ટી.પુ. તથા નાઇ.ખેસ.ટી.ઇ.નાં સલ્યોગથી ારુદી દેવમયમેના પ્રાંથાયનું નાયોજન કરાયું હતું. આ શોગામમાં અંતત્વનાં અને estable favolut super લેનએલ-૩ અને નેટર્સીય જેવા ઉપયોગે આવરી લેવામાં આવ્યા ાતા અને આ વિષયો ઉપર વાર્ગદર્શન અપાવું હતું. જેમાં ત્રમગ ગુજરાતની કોલેલો તેલાડી.એન્જી નિયરીંગ તમદાવાદ, ખેતાથી બાઈ.ટી.



લંવેજ ભાષનમાં, સાધારી પ્રેમેજ રાજકોટનાં વિચાર્યીનાં બને બી.વી.બંધ. કોલેજ વલવ પ્રાપ્યાપકોએ ભાગ શીધો હતો. fameater. 30114134

Sieves ippeint in હો.મયુરભાઈ વંગદ, પારસંદ શતા. શાંતીયાય શાહ સરકરી. આઈ.રી.બેસોસીબેશનનાં પ્રયપ્ત પનિયોલેટીનાં લે.જસાવનાં

એનઆઇટી સુરયકળના દો.મોફિતજાઇ તાહીલીયા, Di+id'um સંસ્થાનાં ด้.พร้องคอร์ ข้องจะ ฮาปโกก रहत दला. आंधामनी सङ्ग्रहत આઈ.રી. લે લાં સીલે પ્રનનાં MHIN જપદિપાલાં નંદાનીએ દિષ પ્રસરાથી કરી હતી. તેમનાં પાતામાં તેઓએ જણાવું હતું કે, આ પ્રકારની પ્રોગામ એક મહત્વનું પાસું છે કે તેના દ્રારા नवी हैं इनोशोक अने लेमां ઉપયોગો એવા વ્યક્તિઓ સુધી પહોંચે છે કે જેના ઉપયોગથી

વીવીપી કોલેજમાં ફેકલ્ટી ડેવલપમેન્ટ કાર્યક્રમ



વી.વી.પી ઈજનેરી કોલેજના કમ્પ્યુટર વિભાગ દ્વારા જીટીયુ તથા આઈ. ટી. ઇ ના સહયોગથી ફેકલ્ટી ડેવલપમેન્ટ પ્રોગામનું આયોજન કરાયું હતું. જેમાં એનએસ 3 અને નેટસીમ જેવા વિષયોને આવરી લેવામાં આવ્યા હતા.

વીવીપી કોલેજમાં કેકલ્ટી ડેવલપમેન્ટ પ્રોગ્રામ યોજાયો





Vote of Thanks:

- ✓ We, the organizers of FDP are very much thankful to VVP Management for giving all support for the success of the FDP.
- ✓ We, the organizers of FDP are very much thankful to our respected Principal Sir Dr. Jayesh Deshkar Sir for motivating us and giving 24*7 support for the success of the FDP.
- ✓ We, the organizers of FDP are very much thankful to our Prof. Shilpa Kathad and Prof. Pooja Raja for guiding us for the success of the FDP.
- ✓ We, V.V.P. Engineering College is thankful to Gujarat Technological University (GTU) for providing us the sponsorship to this dream FDP of CE dept.
- ✓ We are also thankful to Indian Society for Technical Education (ISTE) for the approval of the FDP.
- ✓ We are thankful all staff members of CE dept. who are directly or indirectly related with the FDP.
- ✓ We are thankful to all participants who have actively participated in the FDP as due to their participation we are able to make it happen.
- ✓ Last but not the list we are thankful to all committee members of the FDP (Registration, Accommodation, Food Arrangement, Financial, Printing, Photography, Media Publicity) who made the FDP successful.

Dr. Kamal Sutaria	Dr. Tejas Patalia	Dr. Jayesh Deshkar
Convener	Convener & HoD	Principal
V.V.P. ENGINEERING COLLEGE	V.V.P. ENGINEERING COLLEGE	V.V.P. ENGINEERING COLLEGE