

Sinhgad Technical Education Society's
SKN
Sinhgad Institute of Technology & Science
Lonavala



**Department of Electronics and
Telecommunication Engineering**
Organizes

Four Days National Level FDP
On

NS-2 & NS-3

“Network Simulator”
[NS2 & NS-3]
[7th to 10th October, 2016]



Sinhgad Institutes

SKN Sinhgad Institute of Technology and Science Lonavala,
Off Pune-Mumbai Expressway,
Gat No. 309/310, Kusgaon (Bk), Lonavala 410 401.
Phone : (O) 02114 304 633

About STES

Sinhgad Technical Education Society (STES) was set up in August 1993, under the able and dynamic leadership of Prof. M.N. Navale with an objective of providing quality education in the field of Engineering, Dentistry, Management, Computer, Pharmacy, Architecture, Hotel Management and the basic school education from kindergarten onwards. There are 100+ institutes under the aegis of STES offering full-fledged school education, diploma, Graduation, Post Graduation courses and Ph.D. programs in various branches of Engineering, Science and Management at nine educational campuses ideally located in pollution free lush green and picturesque environment conducive for learning.

About SKNSITS

SKN Sinhgad Institute of Technology and Science is situated at a beautiful location of Lonavala campus of Sinhgad, established in 2011 and is a part of well-known educational trust Sinhgad Technical Education Society having registered office in Pune. SKN Sinhgad Institute of Technology and Science is affiliated to the Savitribai Phule Pune University (SPPU). SKNSITS is engrossed for its highest academic excellence and committed to provide quality education.

Besides conventional teaching, college puts special emphasis on e-based learning, subject-oriented value addition programs, experimental and industry oriented project work along with Entrepreneurship development cell, Student training program, AMCAT, and research club activities. The College has an established system of feedback from the students, parents and industry. Every student is closely monitored by the system of Local Guardian scheme.

How to reach:

SKNSITS Institute is located in Lonavala which is 4Km from Lonavala Railway station and 5Km from bus stand. It is at a distance of 60 Km from Pune and 90 Km from Mumbai, located on Mumbai-Pune Expressway. It is very popular hill station in western part of Maharashtra. The atmosphere in Lonavala is quite pleasant to stay especially during rainy season. Also, nearby National airports are Mumbai and Pune.

Chief Patrons:

Hon. Prof. M. N. Navale, Founder President, STES, Pune
Hon. Dr. (Mrs.) Sunanda M. Navale, Founder Secretary, STES, Pune
Hon. Ms. Rachana Navale Ashtekar, Vice-President (Admin), STES, Pune
Hon. Mr. Rohit M. Navale, Vice President (HR), STES, Pune

Patrons:

Dr. A. V. Deshpande, Principal, SKNCOE, Vadgaon Pune
Dr. S. D. Lokhande, Principal, SCOE, Vadgaon Pune
Dr. M. S. Gaikwad, Principal, SIT, Lonavala
Dr. S. N. Mali, Principal, SITS, Narhe, Pune
Dr. C. B. Bangal, Principal, RMD SSoE, Warje Pune
Dr. R. S. Prasad, Principal, NBN SSoE, Ambegaon
Dr. K. P. Patil, Principal, SAE, Kondhawa, Pune

Organizing Chairman

Dr. M. S. Rohokale
Principal, SKNSITS, Lonavala

Advisory Committee

Prof. R. M. Thadi, HOD, E &TC Dept., SKNSITS
Prof. N. K. Gavade, HOD, MECH Dept., SKNSITS
Prof. V. D. Thombare, HOD, CSE Dept., SKNSITS
Prof. S. Datey HOD, ELECT. Dept., SKNSITS
Prof. G. Kadam HOD, IT Dept., SKNSITS
Prof. G.V. Khandekar HOD, Applied Sci. Dept., SKNSITS,

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For Accommodation

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Organizing committee

Dr. Prakash. H. Patil Ms. Sushma B. Ambekar
Mr. Abhijit A. Chavan Mrs. Priyanka D. Halle
Mr. Suhas S. Chavan Mr. Amol Satpute
Mr. Rohan S. Musale Mrs. Snehal Khartad
Mr. Prashant Karkale

About the Program:

The performance of the wired and wireless network protocols can be evaluated using simulation tools. Popular open source network simulators like NS-2 and NS-3 are extensively adopted by the Research community. NS-2-NS-3 can be efficiently used to simulate the real time secure network applications.

Program Objectives:

➤ To understand the code of existing protocol in NS-2 and NS-3, to add new Modules, to work on case studies for Protocol Simulations in NS-2 and NS-3

Prerequisites for the course:

- Programming Knowledge of C, C++
- Knowledge of Networking.

Course Outline

- Installation of Linux, Basic Linux Commands & Programming, Cisco Packet Tracer
- NS-2 Stack –Architecture, Wired Networks with UDP and TCP, NAM window
- Wireless Network with UDP and TCP, Trace file Analysis: Xgraph, Tracegraph and AWK / PERL Scripts
- Wired-cum-Wireless Networks, Heterogeneous Networks Handover: WLAN, WiMAX and UMTS Networks
- MANETs: Routing Algorithms, Energy Managements in MANETs, WPAN: Bluetooth Wireless Sensor Networks (WSN): PHY & MAC
- VANETs: NS-2 and VanetMobisim / SUMO
- Network Security Modelling, recompilation of source code, Installation of NS-3, NS-2 Vs NS-3
- NS-3 Node Architecture & Objects, C++ programming with Python Scripts
- Point -to-point and CSMA (Ethernet), Tracing Wireshark, NetAnim & Tracemetrics
- Wireless Network Topology, Graphs: GNU Plots Visualizing– python Visualizer
- TCP– Congestion Control Protocol, TCP–FTP Transfer, UDP – Echo Server
- VANETs: WiFi and WAVE Protocols, Integration of V2V and V2I with SUMO
- LTE Stack: Propagation and EPC Models, WiMAX Modeling. Contiki for WSN Simulation, WSN applications in Contiki, IoT simulations in Contiki, 5G Simulations in NS-3

Registration Fee Particulars:

Research Scholars/PG Students : ₹ 2500/-
Industry Delegates : ₹ 3000/-

The registration fee includes admission to all sessions, kit, PPT (soft copy) and lunch.

Send your filled registration form for confirmation through email (ns2ns3sknsits@gmail.com) or submit online. The registration fees can be paid in cash/DD/ Pay order drawn on in favor of “Principal, Sinhgad Institute of Technology, Lonavala. Payable at Lonavala or you can pay at the time of registration.

Note: Registrations are limited to 40 participants only and will be considered on first come first basis.

Accommodation:

External participants will be provided lodging and boarding in college campus at normal rates (₹ 200/per day) provided that they should intimate the coordinators about it or must be mentioned in registration form.

IMPORTANT DATES

Last date of Registration: 5th October, 2016

Completed registration form in prescribed format must reach to event coordinator on or before 5th October 2016. Advance copy of registration form must be sent via email on below mentioned mail address.

ns2ns3sknsits@gmail.com

MAILING ADDRESS

To,
The Convener,
Electronics and Telecommunication Department,
SKN-Sinhgad Institute of Technology and Science
Gat No. 309/310, Kusgaon (Bk), Lonavala 410 401.
Phone: (O) 02114 304 633

REGISTRATION FORM Four Days National Level FDP On “Network Simulator” [NS2 & NS-3]

7th to 10th October, 2016

1. Name: _____

2. Designation _____

3. Department _____

4. Institute/Organization: _____

5. Address for Correspondence: _____

Mobile No: _____

Email: _____

6. Accommodation needed: **YES / NO**

7. Registration Fee Rs. ____/- to be paid in cash at the time of registration.

Date & Place: _____

Sign of Participant

Sign & Seal of Sponsoring
Authority