ANNOUNCEMENT

Workshop

On

Network Simulation (WNS-2016) (NS-2/NS-3)

Sponsored by

Research & Consultancy MNNIT Allahabad

For Technical grooming of the technocrats associated with AICTE approved educational institutes

Arise, awake and do not stop until the goal is reached.

-Swami Vivekananda

Date: September 28th to October 2nd, 2016



Organized by

Department of Computer Science & Engineering Motilal Nehru National Institute of Technology Allahabad Allahabad-211004, Uttar Pradesh, India

THE INSTITUTE

Motilal Nehru National Institute of Technology (MNNIT) Allahabad is one of the premier National Institute of Technology (NIT) in India. It is committed to achieve quality and excellence in academic pursuits. Established in 1961, as a Regional Engineering College, a joint enterprise of Government of India (GOI) and Government of Uttar Pradesh, the institute was transformed into NIT on June 26, 2002. With the enactment of NIT Act-2007 (29 to 2007), the Institute has been granted the status of institution of national importance w.e.f. August 15, 2007.

The Institute now offers various undergraduate and postgraduate courses such as B.Tech, M.Tech, MCA, MBA, M.Sc., M.S.W and Ph.D. degree. It has been recognized by GOI as one of the Quality Improvement Programme (QIP) centres for the M.Tech. and Ph.D. Degrees. Also, it is a lead Institution under World Bank funded GOI Project on Technical Education Quality Improvement Programme (TEQIP) (2002-2007).

DEPARTMENT OF COMPUTER SCIENCE AND **ENGINEERING**

For the first time in India under graduate course in Computer Science and Engineering was offered in 1977 under Electrical Engineering Department with a modest strength of 10 students.

The Department of Computer Science & Engineering offers courses leading to a Bachelor of Technology in Computer Science & Engineering, and Information Technology. It also offers a Master of Technology in Computer Science & Engineering, Master of Technology in Software Engineering, Master of Technology in Information Security, and Master of Computer Application (M.C.A.). Further, the department also enrolls candidates for Ph.D.

ALLAHABAD

The city of Allahabad is among the largest cities of Uttar Pradesh. It is situated at the confluence of three rivers- Ganga, Yamuna and the mythological Saraswati. The sacred meeting point is known as Sangam. The city better known as PRAYAG has many governmental institutions which include MNNIT Allahabad, High Court of UP, Allahabad University & tourist places like Sangam, AnandBhawan, Narayan Ashram etc. MNNIT Allahabad is one of the premier institutes of the city offering Quality Technical Education.

COMMITTEE

ORGANIZING COMITTEE

Prof. S.K. Duggal, Director, M.N.N.I.T. Allahabad

Dr. Neeraj Tyagi, Head, Department of Computer Science and Engineering

Course Coordinator

Dr. R. S. Yadav

Dr. Ranvijay

Er. Dinesh Singh

Course Co-coordinator

Er. Rupesh Kumar Dewang

Er. Divya Kumar

Treasurer:

Mr. Pankaj Sikka

Members

Dr. Shashank Shrivastav, Member

Er. Dushyant Kumar Singh, Member

Dr. Pragya Dwivedi, Member

Mrs Rajitha B, Member

Miss. Shashwati Banerjee, Member

Student Coordinators

- 1. Harshdeep Das
- 2. Akash Agrawal

ADVISORY COMMITTEE

- Prof. Suneeta Agarwal, Department of C.S.E., M.N.N.I.T, Allahabad
- Prof. M. M. Gore, Department of C.S.E., M.N.N.I.T, Allahabad
- Prof. Neeraj Tyagi, Department of C.S.E., M.N.N.I.T, Allahabad
- Prof. Rajeev Tripathi, Department of ECE, M.N.N.I.T, Allahabad
- Dr. D. S. Kushwaha, Department of C.S.E., M.N.N.I.T, Allahabad
- Dr. A. K. Singh, Department of C.S.E., M.N.N.I.T, Allahabad
- Dr. D. K. Yadav, Department of C.S.E., M.N.N.I.T, Allahabad
- Mr. Manoj Wariya, Department of C.S.E., M.N.N.I.T, Allahabad
- Er. Rajesh Tripathi, Department of C.S.E., M.N.N.I.T, Allahabad
- Dr. Arun Prakash, Department of E.C.E., M.N.N.I.T, Allahabad
- Dr. Y. K. Prajapathi, Department of E.C.E., M.N.N.I.T, Allahabad
- Dr. Mayank Pandey, Department of C.S.E., M.N.N.I.T, Allahabad
- Dr. K. K. Mishra, Department of C.S.E., M.N.N.I.T, Allahabad
- Dr. Anoj Kumar, Department of C.S.E., M.N.N.I.T, Allahabad

ADDRESS FOR COMMUNICATION

Complete registration form, accompanied by the demand draft should reach the course coordinator on or before 20th September 2016. The contact details are:

Er. Dinesh Singh

Department of Computer Science and Engineering Motilal Nehru National Institute of Technology Allahabad

Allahabad-211004 Phone: 0532-2271351

E-mail: dinesh singh@mnnit.ac.in

For any further information / assistance you may contact the coordinators

at the following address:

wns2016@mnnit.ac.in

Also, the participants are requested to send a scanned copy of the form along with the Demand Draft on the above email, to avoid inconvenience caused by postal delays.

INTRODUCTION

The usage of communication network have grown exponentially for the several years presenting critical challenges and the new opportunities to service providers, communication technology developers, outsourcing firms and enterprises themselves. In this field, network engineers also must work proactively to improve performance and operational costs of the existing functions and to work efficiently to increase through new demand of network usage. The recent development has resulted in substantial advances in our ability to model and simulate large-scale networks. The network simulator NS-2/NS-3 is an open source event driven simulator available free of cost. The NS-2/NS-3 simulation tool is helpful in open networking research and extensively used to solve modern networking assignments.

TENTATIVE TOPICS TO BE COVERED IN WORKSHOP

- Overview of NS-2, C++ and oTcl integration
- Creating wired and wireless scenario using NS-2
- Performance evaluation of existing routing protocols using NS-2
- Implementation of new routing Protocols related to MANET and Sensor network
- Using Xgraph, gnuplot, and AWK scripts for Trace file analysis
- Introduction & Installation of NS-3
- Using NetAnim, Wireshark and TraceMetrics
- Creating new modules (protocols) in NS-3
- Adding external patches to NS-2 / NS-3
- Advanced features of NS-3

OBJECTIVE OF THE WORKSHOP

This workshop will help the researcher's working in area of mobile ad-hoc networks, wireless sensor networks and vehicular ad hoc networks. The purpose of this workshop is to provide an insight into fundamentals of network simulation (NS-2/NS-3). They learn how different network topologies would be simulated and analyised. The main focus is on participants become capable enough to write their own simulation model, test the model and draw conclusions.

WORKSHOP IMPACT - EXPECTED OUTCOME

Enhancing the curriculum of computer networks and network simulation. The workshop content is designed to provide in depth knowledge and complex interaction between network protocols and their implementation. Through this workshop, the research student will be able to implement and analysis their self-designed protocols using above simulation tools. This will definitely help the students to complete their research projects.

Course Duration: one week, September 28th to October 2nd, 2016 Last Date for Receipt of Application Form: 20thSeptember 2016

WHO SHOULD ATTEND

This workshop will be of value of undergraduate students, research scholars (PhD, M.Tech) and faculties those are interested in the field of computer networks and communication.

REGISTRATION

To register for this course the applicants will have to pay fees in advance as per the following details

Category	Workshop
Industry Personnel	4000
Faculty	3000
Research Scholars, M.Tech and B.Tech.	2000

The registration fees should be sent in the form of a Demand Draft in favour of "WNS-2016" payable at Allahabad. Limited accommodation may be provided on first come first serve basis to the participants, based on the availability of rooms in the institute EDC, Hostels and other available places (Female Participants will be given preference). The participants have to bear their travelling and lodging expenses. Also, you are requested to send a proof of your identity and designation for claiming the category.

Registration fees include:

- Training Charges
- Lab Sessions
- Certification Charges
- Lunch and Tea

Department of Computer Science and Engineering Motilal Nehru National Institute of Technology Allahabad Allahabad -211004

REGISTRATION FORM

Workshop

On

Network Simulation (WNS-2016)

(NS-2/NS-3)

(September 28th -2nd October, 2016)

Name (in Block Letters)		
Father Name :	Mother Name:	
Date of Birth	_ Sex: Male/Female	
Mobile No :	Nationality	
Email Id :		
Correspondence Address :		
Course (B.Tech/M.Tech/PhD/othe	rs)	
Percentage/CPI/CGPA up to last Semester		
Faculty (Experience in Yearl) :		
Accommodation needed Yes/No		
PAYMENT DETAILS:		
Draft No	Date:	
Issuing Bank and Branch (with co	de)	
Amount: Drawn	on:	
(In favour of 'WNS-2016" at 'Alla	habad')	

(Signature of Applicant)