About Meghalaya

Carved from the erstwhile State of Assam, Meghalaya became a fully fledged State on January 21, 1972. Bounded on the North and East by Assam and on the South and West by Bangladesh, Meghalaya is spread over an area of 22,429 square kilometres. Shillong is the capital of Meghalaya. The State enjoys a temperate climate. It is directly influenced by the South-West Monsoon and the northeast winter wind. The principal languages in Meghalaya are Khasi, Pnar and Garo with English as the official language of the State. Meghalaya's main ethnic communities, each having its own distinctive customs and cultural traditions are the Khassis, the Garos and the Jaintias said to be from South East Asia. The common trait binding all three communities is its matrilineal system in which the family lineage is taken from the mother's side. The people of Meghalaya are known to be hospitable, cheerful and friendly.

About North-Eastern Hill University

North-Eastern Hill University (NEHU) was set up by an Act of Parliament and notified on 19th July 1973. The objectives of the University, as laid down in the act, are "to disseminate and advance knowledge by providing instructional and research facilities in such branches of learning as it may deem fit; to pay special attention to the improvement of the social and economic conditions and welfare of the people of the hill areas of the North-eastern region, and in particular, the intellectual, academic and cultural advancement". With its Headquarters at Shillong, it has a campus in Tura, West Garo Hills District, Meghalaya. The Department of Information Technology was instituted in the year of 2006, under the School of Technology, NEHU, funded by MHRD, Govt. of India, with a prime focus to impart quality, career-oriented engineering education in order to produce bright technologist for the country.

To reach us

Nearest Airport: Umroi, 35 Kms from Shillong is the nearest Airport. Another convenient Airport is Guwahati, 128 Kms from Shillong. A helicopter service operates between Guwahati-Shillong.

Nearest Railway Station: The nearest railhead is Guwahati, 104 km from Shillong, and number of state transport and private buses and shared taxies run from Guwahati to Shillong at frequent intervals. Guwahati is very well connected with all major cities of India.

Direction: A journey by bus from Guwahati to Shillong takes around 4 hours. Taxis and auto-rickshaws are also available from Shillong town to the University campus.

ISI-NEHU WINTER SCHOOL ON
SOFTWARE COMPUTING, PATTERN RECOGNITION AND IMAGE PROCESSING

October 20 – 24, 2011

Department of Information Technology
North-Eastern Hill University, Shillong, Meghalaya

Organized jointly by

Machine Intelligence Unit
Indian Statistical Institute (ISI)
203 B. T. Road, Kolkata, 700108, West Bengal

&

Department of Information Technology
North-Eastern Hill University (NEHU)
Shillong, 793022, Meghalaya
Objective: The school is aimed at providing an opportunity to the research students and teachers of north-eastern colleges/universities, with background in mathematics, statistics, computer science, electrical and electronic engineering, information technology, physics, biology and related areas, to be exposed to recent state-of-art of Soft Computing, Pattern Recognition and Image Processing. Topics of the school will range from introductory concepts, theoretical developments, to different real life applications, and will be covered mostly by the faculty members of the Machine Intelligence Unit, ISI, Kolkata.

Theme: Recent advancement and wide use of sophisticated technology for research are producing enormous amount of data in various fields. The successful analysis and interpretation of data has become critical. Soft computing, pattern recognition techniques and machine learning methodology provide useful tools for analyzing these data.

Soft computing is a consortium of methodologies such as fuzzy logic, neural networks, genetic algorithms, and rough sets that works synergistically and provides flexible information processing capabilities for handling real life problems. Its aim is to exploit the tolerance for imprecision, uncertainty, approximate reasoning and partial truth in order to achieve tractability, robustness, low solution cost, and close resemblance with human like decision-making. It constitutes one of the foremost application domains, where pattern recognition is found to hold great promise. The objective is to extract some useful information from data, and thereby provide some knowledge for understanding the underlying patterns, hidden inside the data.

Image processing has been found to be the most active areas of research for the last couple of decades and is still active for very many challenging problems in academics and industry. Some of the basics for image processing include gray-level thresholding, edge detection, region growing, enhancement, sharpening and smoothing. Besides, analysis and processing of textured images, remotely sensed images, radar images and medical images are of immense use. Various transformations also play a strong role in frequency domain analysis of images. The role of wavelet transform in image compression is an example.

Venue: Department of Information Technology, North-Eastern Hill University, Shillong, 793022, Meghalaya

Duration: October 20-24, 2011.

Participants: Research scholars and teachers from colleges/universities/research institutions/laboratories in the north-eastern region of India having interest in related fields.

Support: There is no registration fee for the school. Outstation participants will be provided local hospitality and 2nd class railway/bus fare by the shortest route.

Patron: B. Roy, 
Director, ISI

Program Coordinator: P. Maji, ISI

Program Convener: I. Hussain, NEHU

Local Organizing Committee:
I. Hussain, NEHU  A. K. Maji, NEHU
S. Roy, NEHU  S. K. Dutta, NEHU
S. Das, NEHU  S. C. Sahana, NEHU
J. Narayan, NEHU  F. S. Cajee, NEHU

Speakers:
S. K. Pal, ISI
M. K. Kundu, ISI
C. A. Murthy, ISI
S. Bandyopadhyay, ISI
S. N. Biswas, ISI
D. P. Mandal, ISI
R. K. De, ISI
P. Maji, ISI

REGISTRATION FORM
ISI-NEHU WINTER SCHOOL ON SOFT COMPUTING, PATTERN RECOGNITION AND IMAGE PROCESSING
October 20 – 24, 2011
Department of Information Technology, North-Eastern Hill University, Shillong, Meghalaya

Name: ..................................................
Designation: ..........................................
Institution: ............................................
Address: .................................................
Telephone: .............................................
Fax: ....................................................
Email: ..................................................
Qualifications: ........................................
(Enclose additional sheets if required)
Publications: .........................................
(Enclose additional sheets if required)

Accommodation required: Yes / No

Please photocopy the Registration Form for additional registrants.