



Green Internet Routers

Speaker: Prof. Sartaj Sahni

Where: NSIT Auditorium

When: 4:30 PM, 12th August 2010

Abstract: Internet traffic moves from source to destination via intermediate Internet nodes. At each intermediate node, an outer is used to determine the next node on the source to destination path. The design of an Internet router poses several challenges including energy consumption and processing speed. This talk focuses on the energy consumption trend by worldwide Internet routers and on research to reduce the energy consumed while simultaneously improving processing performance. Since Ternary Content Addressable Memories are widely used in commercial routers and since these memories consume significant energy, the talk focuses on recently developed energy efficient router lookup table designs using these memories.

Bio: Sartaj Sahni is a Distinguished Professor and Chair of Computer and Information Sciences and Engineering at the University of Florida. He is also a member of the European Academy of Sciences, a Fellow of IEEE, ACM, AAAS, and Minnesota Supercomputer Institute, and a Distinguished Alumnus of the Indian Institute of Technology, Kanpur. In 1997, he was awarded the IEEE Computer Society Taylor L. Booth Education Award "for contributions to Computer Science and Engineering education in the areas of data structures, algorithms, and parallel algorithms", and in 2003, he was awarded the IEEE Computer Society W. Wallace McDowell Award "for contributions to the theory of NP-hard and NP-complete problems". Dr. Sahni was awarded the 2003 ACM Karl Karlstrom Outstanding Educator Award for "outstanding contributions to computing education through inspired teaching, development of courses and curricula for distance education, contributions to professional societies, and authoring significant textbooks in several areas including discrete mathematics, data structures, algorithms, and parallel and distributed computing." Dr. Sahni has published over three hundred research papers and written 15 texts. His research publications are on the design and analysis of efficient algorithms, parallel computing, interconnection networks, design automation, and medical algorithms.

For More Info Contact:

NSIT: Khushil Saini (khushil@rediffmail.com) IIIT-D: Dr. Amarjeet Singh (amarjeet@iiitd.ac.in)