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Dt: 11th Aug, 2014.

Report on One day Guest Lecture by Alumni, Dr.Madhu Mutyam, Asst, Professor,

IIT, Madras

Under the umbrella of Computer Science & Engineering Department has organized a Guest Lecture on "Innovations in Processor Architecture" for 4th year B.Tech. Students on 11/08/2014 at Room No C-121 from 12.00 Noon to 01.30 PM. The resource person Dr. Madhu Mutyam, Asst. Professor, IIT, Madras and alumni of this Institute has visited to our campus to deliver a guest lecture on Processor variants and architectures of systems. Around 150+ students of 4th B.Tech and faculty members have been attended for this program.

Dr. K.Thirupathi Rao, Head of the CSE Dept. has given welcome speech and given a brief profile of the guest Dr. Madhu and honored with a bouquet.

Dr. Madhu Mutyam is working as Asst. Professor in IIT, Madras. He has delivered speech on "Innovations in Processor Architecture".

Dr. Madhu explained the increased performance of different processors such as Intel Pentium, Intel core2 duo, Intel Xeon Processors, since 1978 to up to date. He discussed the problems with single 4 bit processor and explained "Parallelism" concept to avoid those problems with an example of "enjoying noodles".

In "Bit level Parallelism" with the addition of two numbers stored in locations X and Y viewing 8-bit & 16-bit processors and concluded that increasing word size will reduce the number of instructions.

Dr. Madhu enlightened "scalar pipelined processor: In order exception and miss-prediction penalties with an example of "UG admissions at KL University". He also explained on "Super-scalar processor exploiting instruction level parallelism" concepts to speed up the admission process further. He explained "Multithreading" to handle different categories of admissions efficiently to improve the performance further.

Dr. Madhu discussed on Applications demanding high performance, blocks for single-core performance, paradigm shift-multi core processor and heterogeneous cores – IBM, Intel. He says instead of investing on a single high performance processor, invest on multiple processor systems we able to complete the task in parallel while discussing on Task Parallelism. He also

explained on GPU graphics processing unit which runs multiple processors simultaneously and GUP's as parallel computers.

The CSE faculty members are interacted with him and discussed on their research work. Dr. V. Chandra Prakash who is a teacher of Dr. Madhu when he was student of KLCE presented a memento to the guest.

Dr. G. Rama Krishna, Sr. Professor of CSE, Dr. K.Thirupathi Rao, Head of the Department, Dr. V. Krishna Reddy, Alternate HOD, Program in-charge Dr. K.V.V. Satyanarayana, Program members Mr. A.V. Praveen Krishna, Mr. K. Ravindranath and Dr. Sheela and other faculty members were also present.

Dr. K. Thirupathi Rao addressing the audience and introduced Dr. Madhu Mutyam

Dr. K. Thirupathi Rao greet the Dr. Mutyam

Dr. Madhu Mutyam address the gathering

Dr. Madhu Mutyam in his inspiring speech at the audience

Prof-Incharge Alumni HOD-CSE