

CANS Master's Degree Program, Spring 2007-2008

Visiting Faculty Courses

SEMINAR 1

Issues in Computer Architecture and Microarchitecture for Future Computing Machines (3 credits – 3 ECTS – 30 Hours)

Prof. Yale Patt (University of Texas at Austin, USA)

During the period 19th May – 30th May

Mo. May 19: 1800-2100 Introduction and focus on the major issues.

Tu. May 20: 1800-2100 A science of tradeoffs (Arch, Microarchitecture)

We. May 21: 1800-2100 Branch Prediction: Why? How? Including new results

Th. May 22: 1800-2100 Run time: SMT, SSMT, CMP, Trace Cache, Runahead

Fr. May 23: 1700-2000 Compile time: BS-ISA, Predication, Wish branch, Braids

Mo. May 26: 1800-2100 Implications of core multiprocessors

Tu. May 27: 1800-2100 Case Studies

Mo. June 2: 1800-2100 Future microprocessors: Challenges, potential solutions

We. June 4: 1500-2100 Paper presentations/critiques.

Fr. June 6: Take home exam (one hour)

Everyday at room C6-E101

SEMINAR 3

Profiling and Optimization (3 credits – 3 ECTS – 30 Hours)

Prof David Kaeli (Northeastern University (Boston, USA))

During the period 13th May – 23rd May

Tu. 13, 17-20 room C6-E101

Wed. 14, 11-14 and 16-18 room C6-E101

Th. 15, 8-11 room C6-E106

Fr. 16, 8-11 room C6-E106

Mo. 19, 8-11 room C6-E106

Tu. 20, 12-15; room C6-E106

We. 21, 11-14 and 16-18 room C6-E106

Th. 22, 8-11 room C6-E101

SEMINAR 8

HIPEAC Summer School Seminars (3 credits – 3 ECTS – 30 hours)
Local organizer contact: Prof. Nacho Navarro (UPC)

During the period July 13 to July 19, 2008, at L'Aquila, Italy

SEMINAR 10

Programming Accelerator-Based Parallel Architectures (1,5 credits – 1,5 ECTS
– 15 Hours)
Prof. Dimitris S. Nikolopoulos (Virginia Polytechnic Institute and State
University, USA)

During the period 3rd June – 13th June

Tu. 3, 12:00 – 14:00 h.

We. 4 12:00 – 14:00 h.

Fr. 6 17:00 a 19:00 h.

Tu. 10, 12:00 – 14:00 h.

We. 11 12:00 – 14:00 h. and 16:00 – 18:00 h.

Fr. 13 17:00 –19:00 h.

Everyday at room C6-E101

SEMINAR 11

Automatic Program Parallelization (1,5 credits – 1,5 ECTS – 15 Hours)
Prof. Rudolf Eigenmann (Computing Research Institute, Purdue University,
USA)

During the period 26th May – 6th June

Tu. 27, 12:00 – 14:00 h. Room C6-E106

We. 28 12:00 – 14:00 h. Room C6-E106

Th. 29 12:00 – 14:00 h. Room C6-E106

Fr. 30 08:00 – a 10:00 h. Room C6-220

Tu. 3, 12:00 – 14:00 h. Room: to be confirmed

We. 4 12:00 – 14:00 h. Room: to be confirmed

Th. 5 12:00 – 14:00 h. Room: to be confirmed

SEMINAR 12

Network Coding and its Applications in Communication Networks (3 credits – 3
ECTS – 30 Hours)
Prof. Alex Sprintson (Texas A&M University, USA)

During the period 16th June – 4th July

Monday to Friday from 12:00 – 14:00 h. Room C6-E106