CSE 378 Autumn 1999

Machine Organization and Assembly Language Programming

Where and When

Lectures:	MEB 238 MWF 11:30-12:20
Section AA:	MEB 246 Th 9:30-10:20
Section AB:	Low 217 Th 12:30-1:20
Section AC:	MUE 153 Th 12:30-1:20

Instructor

Jean-Loup Baer, 211 Sieg Hall, 685-1376, baer@cs
Office hours: M 3:30-4:30 F 2:30-3:30 or by appointment.

Teaching Assistants

Office hours:

Course Goals

¿From the programmer's point of view, "the hardware" is given by its architectural specification. We will look at the general topic of computer architecture, using the MIPS R2000 as a specific example, and its most obvious exposure to the programmer, assembly language programming.

Note that assembly language is almost never used to write large complete programs anymore. However, it is still used to write some machine specific code, like device drivers or in some DSP/embedded processors. Moreover, your C or C++ code is turned into an assembler program by the compiler. Once you've seen assembly code, many mysteries about programming will suddenly become clear.

Text:

D.Patterson and J.Hennessy *Computer Organization & Design: The Hardware/Software Interface* 2nd Edition, 1998

Homework:

There will be assembly language programming assignments or problem sets from the book every week (well almost every week). You can discuss the assignments with each other but you should do the actual work by yourselves.

Please hand in your assignments on the due date in class. Late assignments will not be accepted.

Grading:

Homework 40%; midterm 20%; final 40%. These percentages are approximate.

Intangibles may arise. Class participation is a bonus. (Class participation is strongly encouraged. Don't be afraid to ask questions: dumb questions do not exist. If I ask you a question and you don't know, just say so. That's no problem. I will certainly answer some of your questions also by "I don't know!".)

e-mail and WWW

We will have a class mailing list and we will communicate often through e-mail. Feel free to send the TA's or me questions. We will forward questions and answers to the whole class if appropriate. Check the WWW CSE378 home page often.