COMPUTATIONAL SCIENCE IN THE UNDERGRADUATE CURRICULUM
* A CONVERSATION ON COMPUTING IN THE DISCIPLINES*

March 4 &5, 1995 at SUNY Geneseo

Sponsored by : State University of New York Faculty Access to Computing Technology Committee
and SUNY Geneseo

Computational Science can be described as that branch of science which uses computational tools and scientific
visualization as the principal method of investigation. While these methods have long been embraced by the
research community, it is only recently that computational science education programs have begun to emerge. This
COCID will discuss the current place of computational science within undergraduate curricula and help charter
future directions.

Do you currently use computational tools in your courses to treat topics that are difficult to approach through
standard analytical methods? Do you wish to integrate numerical methods into physics, chemistry and biology
courses? Innovative curricula currently in place at various institutions will be presented as well as the work of
scientists who make extensive use of computation in their research.

Themes

Computational Science Education:

* Major/minor programs
* Intra-disciplinary courses
* Multi-disciplinary courses
* Desktop vs. High Performance Computing
* New tools - machines/software/algorithms
* Faculty/teacher training

Computational Science Research:

* Academic research programs
* Individual faculty/student projects
* Industrial applications

Workshops

Hands-on workshops are being planned. If you wish to propose a workshop that will use 486PCs or Macintoshes,
please contact us ASAP. Scheduled workshops so far:
* MathCad in Calculus at SUNY Geneseo
* High Performance Scientific Computing (HPSC) at UC Boulder

Panel discussion:

"Does the current state of computational science curricula meet the needs of (1) employers (2) graduate schools in
the 90's? What is the future of this field, in SUNY and elsewhere?"

Submissions:

Please submit a short abstract of 50-100 words of a paper you wish to present or a workshop you wish to lead ASAP
to the e-mail address below. We hope to finalize the program by third week of February. Some funding is
available to cover expenses

Tentative Agenda

Saturday, March 4

9:30 Registration and Continental Breakfast
10:00 Welcoming comments
10:30 Morning Session Papers
12:00 Lunch
1:00 Afternoon Session Papers
2:30 Break
3:00 Workshops
5:00 Dinner on your own
Sunday, March 5

9:00 Continental Breakfast
9:30 Morning Session Papers
11:00 Panel Discussion
12:00 Closing remarks

Directions

By Car

From NYS Thruway (I-90) take I-390 South Exit. Proceed to Exit 8 on I-390 and take a right on Route 20 (there will be a sign for Geneseo). Take a right onto Main Street at the third light (a T-intersection with a Mobil station on the right hand side). Proceed past the fountain and take a left on University. Park on the street or in the large paved lot that comes off University.

By Air

Fly into Rochester International Airport. Take a right out of the airport exit and follow signs for I-390 South. Proceed as above.

Hotel information available on request.

Registration:

There is a $10 registration fee. To register, complete the form below and return via Fax or E-mail to:

S. Raj Chaudhury, Dept. of Physics & Astronomy, SUNY Geneseo, Geneseo, NY 14454
Phone: 716-245-5287* Fax: 716-245-5288 * E-mail: raj@uno.cc.geneseo.edu

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NAME: _____ TITLE: _____

INSTITUTION: _____ _____

MAILING ADDRESS: _____ _____

_____ _____

PHONE: _____ FAX _____

INTERNET E-MAIL : _____ _____