

COMPUTING CURRICULA IN THE NEXT DECADE -- CC2001

PANEL DISCUSSION

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The field of computing is changing at a very fast rate, with an enormous number of developments in the last several years. The computing curriculum of previous years is no longer either adequate or appropriate for the undergraduate students in the next decade and there is an urgent need to upgrade the joint ACM/IEEE Computer Society Computing Curricula CC-91.

The Joint IEEE Computer Society/ACM Task Force on Year 2001 Model Curricula for Computing (CC-2001) was formed to revise Computing Curricula 1991 and develop CC-2001. The task force charter is: To revise the 1991 Joint ACM and IEEE/CS Computing Curricula 1991 (CC-91) and develop a revised and enhanced version for Year 2001

(CC-2001) that will match the latest developments of Computing Technologies in the past decade and sustain through the next decade.

This panel will present recent work and accomplishments of the task force committee and the various subgroups formed. Most importantly, we will solicit feedback and suggestions for revisions and enhancements of the work done to be incorporated into the task force's final report.

CC-2001 task force identified a number of knowledge areas and has formed focus groups to address each area. Fourteen knowledge areas have been identified: Discrete Structures; Programming Fundamentals; Algorithms and Complexity; Programming Languages and Translation; Architecture; Operating Systems; Human-Computer Interaction; Graphics, Visualization, and Multimedia; Intelligent Systems; Information Management; Net-Centric Computing; Software Engineering; Computational Science; and Social, Ethical, Legal, and Professional Issues.

In addition to these knowledge areas, CC-2001 task force has identified six pedagogical areas and has formed a pedagogy focus group for each area: they are The First Year, Supporting Material, The Computing Core, Professional Practices, Advanced Study, and Computing Across the Curriculum.

The panel will present and discuss the Straw Man report of CC-2001. There will be many opportunities for interaction and discussion among the audience. It is hoped that this forum will serve not only as a way to present the task force work but to solicit also feedback and suggestions for the enhancement of the Straw Man report.