

Instruction of computer music for computer engineering students and professionals

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Computer music is subject of courses in several scientific faculties. These activities are in general scarcely known, in spite of their importance in the training of both professionals and researchers. It is important to improve the knowledge of these activities, both for a better coordination and comparison of different experiences, and for the improvement of the state of the art. Instruction could be one of the ways, even if not the only one, to reach such a goal.

Therefore, the panel aims at fostering a better awareness of these aspects and to stimulate the cooperation and the definition of new initiatives for improving the existent scenario of didactics on computer music in scientific faculties.

Another fundamental objective is to bring the field of computer music to a higher consideration in the scientific community. Computer vision and computer graphics are well-established disciplines inside the computer science community: in a similar manner, computer music should aim at consolidating its importance in the same community. Researchers should therefore actively work for a better recognition of computer music as a scientific discipline. The panel will be an occasion for defining and activating proposals to reach this main goal.

This panel is motivated by these issues, and will be concentrated on a selected set of clearly defined issues and state some guidelines to the computer music community:

- the relevance of computer music for the scientific community, with particular regard to computer science (computer engineering).
- collaboration to affirm the importance of this discipline.

Finally, the role of the existing organizations, and in particular the ICMA, the leading organization of the field, and the recently scientific organizations ACM SIGSound and IEEE Computer Society Technical Committee on Computer Generated Music (IEEE CS

TC on CGM) should also be discussed in this scenario.

The panel will start with a few position statements summarizing - in a direct and concise manner - the state-of-the art from different countries on computer music in engineering departments, from both universities and industrial sites. Then, the panel should focus on the problem of defining which should (or might) be the contents of university-level computer music courses in engineering departments. For example, a useful point could be the taxonomy of computer music, published in the *Computer Music Journal* [Pope, 1994].

Then, an analysis of possible research and industrial niches for computer engineering professionals, including industrial activities not necessarily involving art/music, but in which the experience and knowledge acquired in more than 30 years of research in computer music can be useful (e.g., human-machine interaction) should be addressed. This might include an analysis of the relations between computer science aspects of computer music research and other scientific disciplines, as recently faced in the panel on "Computer-Generated Music and Multimedia", held at the 1994 IEEE Conference on Multimedia Computing and Systems [Dannenberg and Camurri, 1994].

References

[Pope, 1994] Pope S.T. *A Taxonomy of Computer Music*, *Computer Music Journal*, Vol.18, No.1, 1994.

[Dannenberg and Camurri, 1994]
Dannenberg R.B. and A. Camurri *Computer-Generated Music and Multimedia*, *Proceeding of the IEEE Conference on Multimedia Computing and Systems ICMCS-94*, IEEE CS Press, pp.86-88, 1994.