

Widespread Use of Force-Feedback Models in Computer Music: Is this ever going to happen?

Marcelo M. Wanderley
IDMIL/CIRMMT, McGill University
INRIA Lille, France

Research in force-feedback applied to music is not recent, with some of its early contributions dating back to the end of the 70s. Despite its longevity, it has been plagued by factors such as (rather exorbitant) hardware costs, software limitations (drivers), fast hardware and software obsolescence, as well as the lack of accessible platforms for prototyping musical applications.

Though a body of work was developed over the years focusing on measurements, models and applications, musical force-feedback has never become as widespread. The “killing” force-feedback musical application is yet to come.

Despite this recurrent and rather depressing situation, in recent years a number of PhD theses have addressed several aspects of this topic, proposing software platforms and simulation models with the potential to provide popular and/or advanced force-feedback tools for musical applications.

What is missing then? Since as researchers and artists we cannot easily change some of the factors described above, I'd suggest that perhaps one of the solutions is creating a group of interested people to collaborate on the development of common (or compatible) tools and share our resources. This would hopefully lead to exchangeable models and tools to facilitate the cooperation in research projects and the development of novel artistic applications.