Approaches for Composing Music for Force-Feedback Instruments

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Composing music for force-feedback instruments is intriguing because relatively little knowledge is available on force-feedback instruments. These instruments are digital instruments that use motors to provide force feedback to a live performer as calculated by a computer. However, tactile and force feedback are crucial for live music performance with traditional musical instruments, so they promise to play an important role in digital music. Using prior works as examples, some approaches for composing force-feedback music are suggested including 1) making use of virtual reality simulators, 2) leveraging the creation of fundamentally new performance gestures, 3) enabling more accurate performance of musical gestures, 4) carefully applying digital audio effects, and 5) generating high fidelity and highly immersive sound.