Seminário

15 de Fevereiro de 2011, Terça-feira
CLAV – Anf. 1 - 11:00 horas

Finding Audio Mosaics with Convex and DC Programming

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Resumo

Creating audio mosaics, or combining and transforming samples to match desired perceptual characteristics, is a key problem of sample-based audio synthesis. By modeling mixes as linear combinations of elements, we can use convex programming (the Basis Pursuit program and variants) to find mosaics that mix simultaneous elements to achieve desired spectral magnitude shapes. We also discuss a recent modification involving minimization of a DC function that can be used to find mixes that are locally contiguous, or tend to continue sources from their original contexts.