

Realtime Generation of Harmonic Progressions in Kinetic Engine

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Abstract. We present a method for generating harmonic progressions using case-based analysis of existing material that employs a Markov model. Using a unique method for specifying desired harmonic complexity, tension between chord transitions, and a desired bass-line, the user specifies a 3 dimensional vector, which the realtime generative algorithm attempts to match during chord sequence generation. The proposed system thus offers a balance between user-requested material and coherence within the database.

The presentation will demonstrate the software running in realtime, allowing users to generate harmonic progressions based upon a database of chord progressions drawn from Pat Metheny, Miles Davis, Wayne Shorter, and Antonio Carlos Jobim. The software is written in MaxMSP, and available at the first author's website (www.sfu.ca/~eigenfel).