

A Database for the Accommodation of Structural and Stylistic Variability in Improvised Jazz Piano Performances

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ABSTRACT

Existing score following databases assume faithful performance of fully notated music. Score following in jazz requires alignment of an improvised performance to a *lead sheet*, the basic template providing a song's melody, harmony and structural information. We have created a database of MIDI recordings performed by professional Chicago jazz pianists using lead sheets. These performers marked their performances with measure, beat and structural branch point information, encoded as MIDI data. A structural analysis of each performance has been created by a conservatory-trained professional jazz pianist. This database will be useful as training and validation data for a jazz score following program.

Twelve pianists each gave three different performances of a song, ranging from a performance closely adhering to the given lead sheet to a more free interpretation that departs from the lead sheet. Our database contains a total of 36 performances divided into 3 sets, constituting 12 varying performances of the jazz standards *Nica's Dream*, *Dindi* and *Without a Song*, respectively. In comparing the musical information provided on a lead sheet with the marked performances of professional musicians, we have identified structural and stylistic variables that a score-following program must take into account. This database is available on request.