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Abstract

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Intelligent Music Composition System for Sundanese Traditional Music

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Sundanese music is one of the many traditional cultural music of Indonesia, the only country with widest diversity in the world. As state in the 1945 CONSTITUTION OF REPUBLIC OF INDONESIA article 32, it is essential to preserve art and culture and to retain its existence. However, this contradicts with the fact that the number of Sundanese music composers is decreasing.

To keep and to enrich the creation of Sundanese music need an intelligent music composition system that aids in producing Sundanese traditional music. Several intelligent music composition machines have been proposed and designed only for Western music such as Automatic Music Composition with Simple Probabilistic Generative Grammars.

Since the features of Sundanese music are different from Western music, to compose Sundanese traditional music based on Sundanese musical rules, a new intelligent music composition system needs to be proposed. The intelligent music composition system starts with the user's requests input consisting of *patet*, *goongan* variation, number of bar and *gerakan*. Then, the system chooses pairing notes using probabilistic generative grammar and clock pattern in the odd bar and *kenongan/goongan* pattern in the even bar and ending with generating Sundanese music score.

This experiment shows that Intelligent Music Composition System (IMCS) for Sundanese traditional music can adapt the Sundanese music rules. In addition, the system is able to combine two instruments. This research concludes that the compositions of Sundanese music produced by the Intelligent Music Composisiton System (IMCS) are regarded as natural as the human composers.

Key-words: Intelligent Music Composition, Sundanese Music, Probabilistic Grammar, Clock Pattern