



A software tool for categorizing violin student renditions by comparison*

***Note:** The full contents of this paper have been published in the volume *Lecture Notes in Artificial Intelligence 11160* (LNAI 11160)

Miguel Delgado, Waldo Fajardo, Miguel Molina-Solana
Department of Computer Science and Artificial Intelligence
University of Granada
Granada, Spain
mdelgado@decsai.ugr.es, {aragorn, miguelmolina}@ugr.es

Abstract—Music Education is a challenging domain for Artificial Intelligence because of the inherent complexity of music, an activity with no clear goals and no comprehensive set of well-defined methods for success. It involves complementary aspects from other disciplines such as psychology and acoustics; and it also requires creativity and eventually, some manual abilities. In this paper, we present an application of machine learning to the learning of music performance. Our devised system is able to discover the similarities and differences between a given performance and those from other musicians. Such a system would be of great value to music students when learning how to perform a certain piece of music.

Index Terms—