

Deep learning implementations for music generation mostly focus on only one task as generating music or creating an accompaniment from a melody. However, a musician can play alone, compose music, or jam and cover songs with a band. The goal of this Dissertation is to implement and train a single model able to perform several tasks as generating a song, harmonizing a melody, creating musical parts from other musical parts and so on, as a musician could do. To this purpose, this work introduces a new architecture (RMVAE) to handle the mentioned tasks. Finally, this Dissertations gives the model some prior knowledge about music through custom cost functions.