To compose music using Genetic and Memetic Algorithms by concurrently and separately processing the rhythmic and tonal components subject to the following criteria:

* The level of effort shall not exceed 1 person-month over 12 weeks
* The rhythmic component will be limited to the following set: whole note, half note, quarter note, eighth note, sixteenth note, whole rest, half rest, quarter rest, eighth rest, sixteenth rest
* All music is assumed to be composed in 4/4 time (4 beats to a measure)
* All music is composed without the use of tied notes
* The tonal component will be limited to the pitches available via the MIDI specification
* The composed music will be presented in MIDI format
* The input music will consist of no less than 30 “walking bass lines” ranging between 8 and 12 measures each
* The input music will contain no tied notes