This two section piece for guitar and MAX explores two different emotions. Throughout the entire piece, a guitarist improvises to pre-recorded and pre-programmed elements within the program. One section is highly chaotic and busy, both melodically and instrumentally, while the other is simpler, and a more sentimental vamp on two chords. There is also a shift towards organic instruments in the second half. The first half only uses organic guitar backgrounds as samples accompanying programmed drums and digital synthesizers, while the second is based around a four-bar organic loop. Moreover, there is a switch in genre. While the progression in the first genre is a blues, the progression used is a variation on the blues taken distinctly from jazz. The second vamp is inspired by rock and pop, genres which also have blues roots, but evolved quite differently. A bridge between the middle allows the guitarist to improvise and eventually give certain audio cues to trigger the next half. The piece also explores human-computer interaction. The system makes melodic, harmonic, and rhythmic decisions based on volume and pitch input from the guitar, and there are some elements in the first section which are random every time. It is unlikely, that even if the guitarist were to provide exactly the same improvisation, that the piece would ever be the same twice. Both sections do however have a stable chord progression and process the live guitar input in certain ways at certain moments, and the second half is entirely predictable.

The two sections of the piece are designed to be impossible to play at the same time. Turning on one will turn off the other. For the first section, there are two different blues melodies that are twelve bars long which are loaded as midi files into the patch. Each of them also come preprogrammed with a list of places in the chart where the phrase ends. When once phrase ends, MAX randomly “decides” to either switch to the new melody or randomly stay on the current melody. There is a 50/50 chance of either. It also makes a decision whether to switch between the two FM synths I made or not. However, before playing the phrase it settles on, it checks to see how loud the guitar volume is. If the guitar volume is sufficiently loud, the next phrase will not play. This gives the illusion that the guitar is collaborating with the machine. At each phrase ending, the drum pattern also switches between one of four beats, although not at a rate more often than once per second. Thus, there are 16 possible configurations at any given moment, with four drum beats, two synths, and two melodies. If one considers the silence of both melodies, as triggered by the guitar, to be another possibility, then this number is 24. The second section is only triggered when two toggles are flipped. The reason for this is that the end of section one triggers one toggle, and then the guitarist has some time to do free improvisation before playing a certain chord to trigger the other through pitch detection. It is with this design that the guitarist has the ability to play the entire piece from beginning to end without touching the computer. Lastly, the guitar audio is is processed with timed effects during each section of the piece.

I affirm that I have adhered to the Honor Code in this assignment