Elevator Speech Outline

Have you heard that in the last few years, biological scientists were able to decipher human DNA? That whole process was finally made possible through the use of computing. My project is very similar, except that I am deciphering the DNA of music by assessing its complexity.

Music educators and performers alike need to know the relative complexity – or difficulty – of a piece in order to judge what is best to play. But assessing musical complexity has long been a tedious, subjective process. As far as I know the only such assessments available today are for k-12 bands that compete in state competitions.

What I’ve created is the first attempt to objectively assess the complexity of music through the use of automated computing. By combining the knowledge of music educators and computer scientists, I have been able to score the relative complexities of the building blocks of music: notes, intervals, tempo, dynamics, key signatures, and articulations. Combining these blocks and their associated values yields an objective assessment of the overall piece.

I have a demo of the website I’ve created available on my laptop so you can try it out for yourself.