

Markov Patterns I

For Solo Vibraphone
(2022)

Kenrick Ho

Preface

The series of *Markov Patterns* are inspired by models of prediction and cognition in music psychology. All four compositions were generated from a machine learning algorithm in Max/MSP which statistically analyses my original composition titled *Adrift*. The algorithm then learns the pitch and rhythmic relationships of the piece using markov functions, and is able to generate predictions with an accurate resemblance to the original piece. The outcome of the algorithm has been taken to form the basis of the four Markov Patterns. The set of pieces aims to explore the integration of statistical analysis and cognitive models of prediction into a computational method for composition.

Performance Notes

There is no time signature, tempo marking, and barlines in the score. The rhythm, contour, and voicing of the notes are free to be interpreted by the performer as long as the overall duration of notes is loosely proportional to the rhythmic value of its given note head.

All notes should be played with sustain pedal depressed. Pedal markings are not provided on the score but pedal should be changed whenever the performer deems necessary.

Simultaneity of chords are not required. The performer may break up chords if they think it helps with the expression of the music.

Soft mallets are recommended for the performance of this piece.

ca. 3'00"

Markov Patterns I

3

For Solo Vibraphone

Kenrick Ho

Slowly (let it take the time it needs)

Pedal and damp as necessary

p *sempre*

pp *p*

pp

pp

Markov Patterns II

For Solo Marimba

(2022)

Kenrick Ho

Preface

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Performance Notes

There is no time signature, tempo marking, and barlines in the score. The rhythm, contour, and voicing of the notes are free to be interpreted by the performer as long as the overall duration of notes is loosely proportional to the rhythmic value of its given note head.

All notes are to be played in tremolandi. Transition between chords should be played smoothly wherever possible, unless an appoggiatura has been used. In that case, the tremolandi can be broken and the player may take as much time as needed to play the appoggiatura note as long as it is gesturally connected to the chord immediately after it.

ca. 4'30"

Markov Patterns II

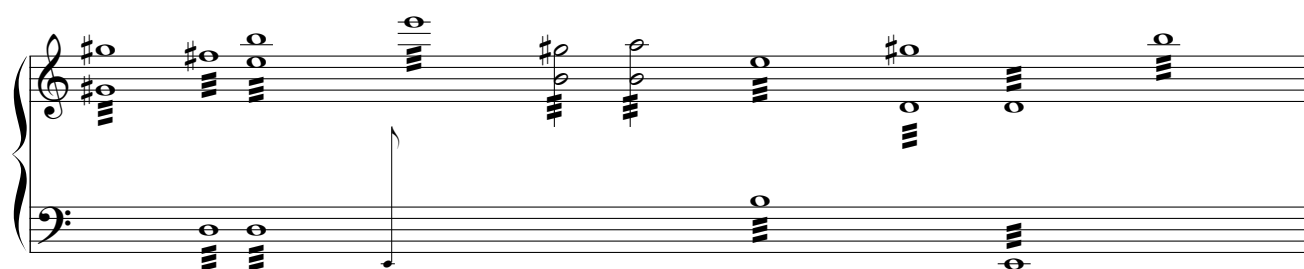
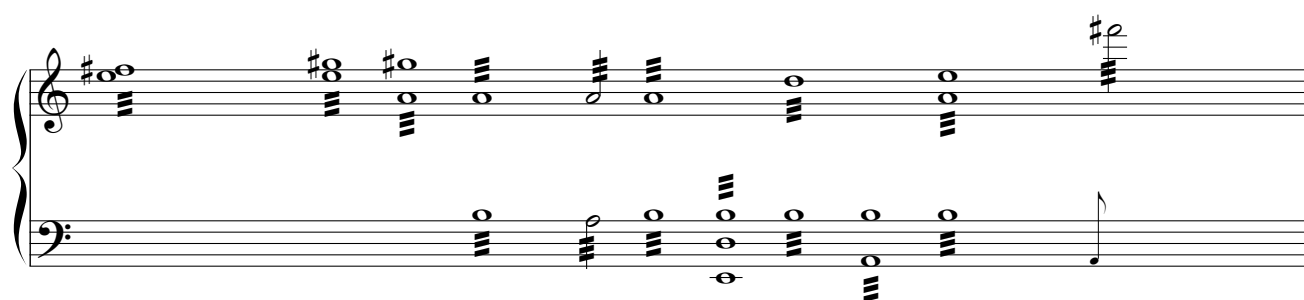
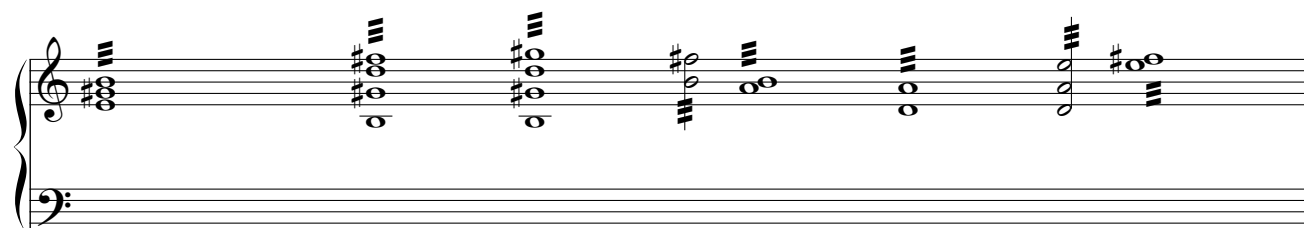
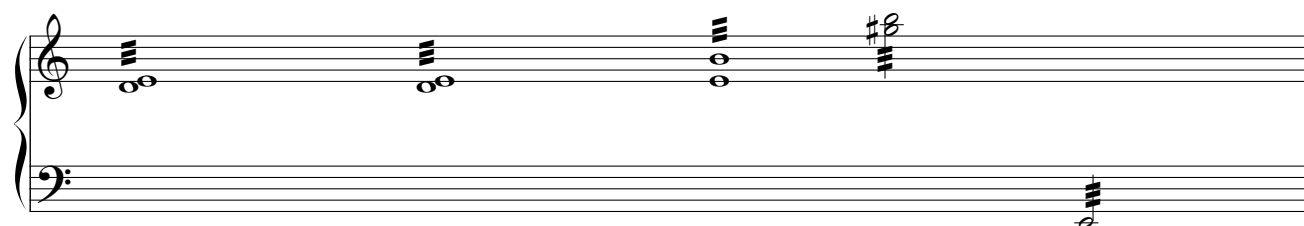
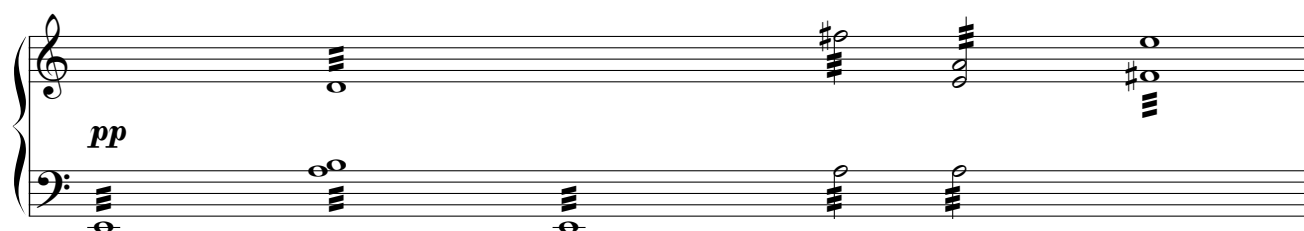
For Solo Marimba

3

Slowly (let it take the time it needs)

Kenrick Ho

Increase or decrease tremolo speed as necessary



This page contains six systems of musical notation for piano. Each system consists of a grand staff (treble and bass clefs) with various chords and melodic lines. The notation includes key signatures (one sharp, F#), and dynamic markings such as *pp* (pianissimo) and *p* (piano). The first system shows a complex chordal structure in the right hand and a simpler bass line. The second system continues with similar chordal textures. The third system introduces more melodic movement in the right hand. The fourth system features a crescendo leading from *pp* to *p*. The fifth system shows a continuation of the melodic and harmonic development. The sixth system concludes with a final *pp* marking and a double bar line.

Markov Patterns III

For 3 Tom-toms
(2022)

Kenrick Ho

Preface

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Performance Notes

This piece is written for 3 Tom-toms but it may also be performed on any percussion instrument with 3 sounds. The only requirement is that the alternative instrument needs to be able to make two sounds simultaneously with ease. The tempo of ♩=150 is for reference only, and the performer is free to speed up or slow down the piece as long as it is generally at a 'comfortably fast tempo'. As there are very few dynamic markings on the score, accents should be emphasized as clearly as possible. The use of hard mallets is recommended.

ca. 3'30"

Markov Patterns III

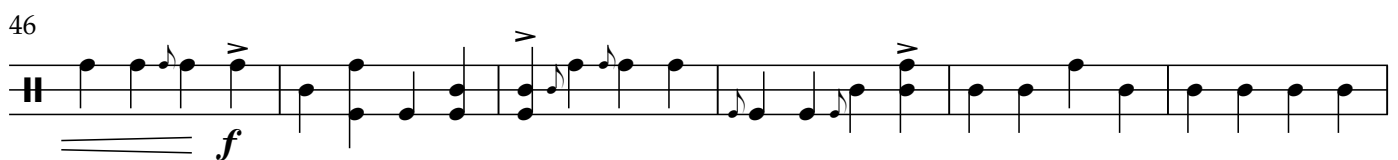
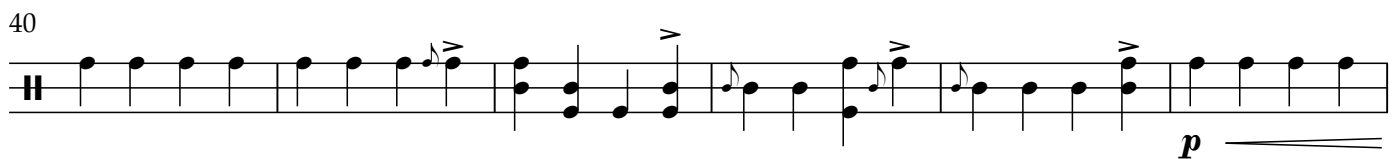
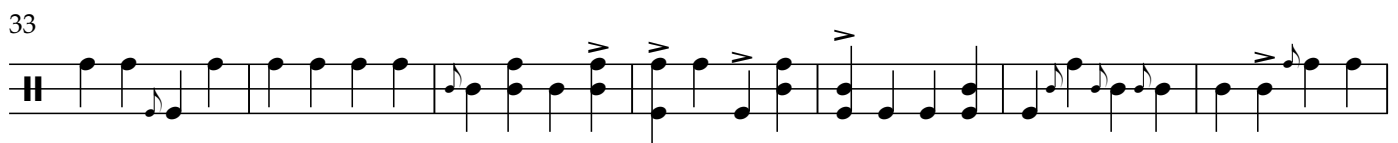
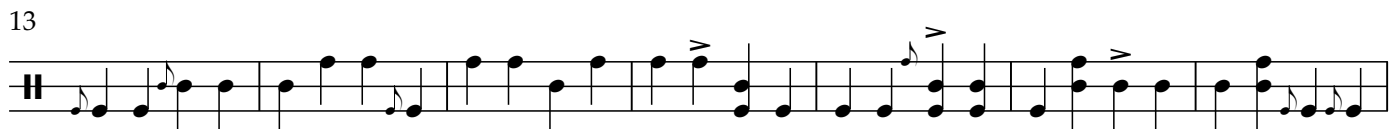
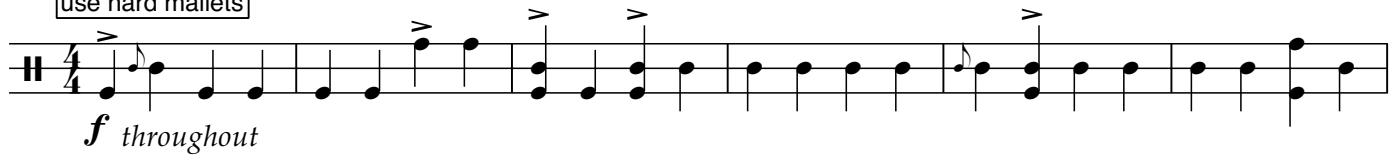
3

For 3 Tom-toms

Kenrick Ho

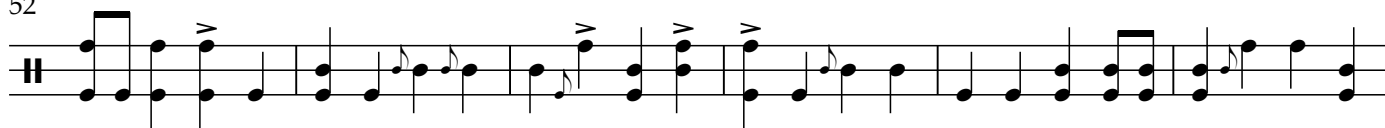
♩ ≈ 150 As fast as you can comfortably play

use hard mallets

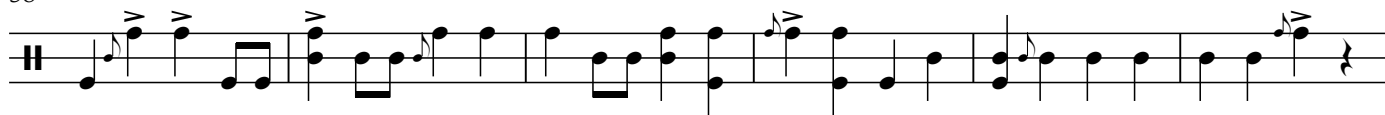


4

52



58



64



70



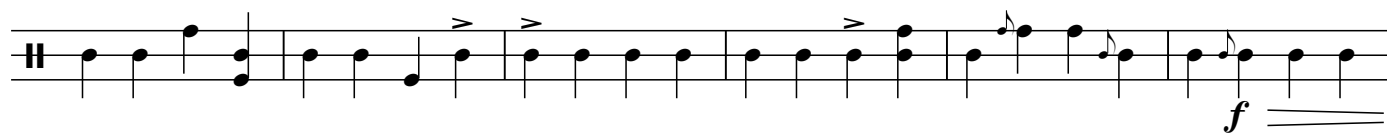
77



84



90



96

