## **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 compsitions 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 resemblence 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 rhyhtm, 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 whenver 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"

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