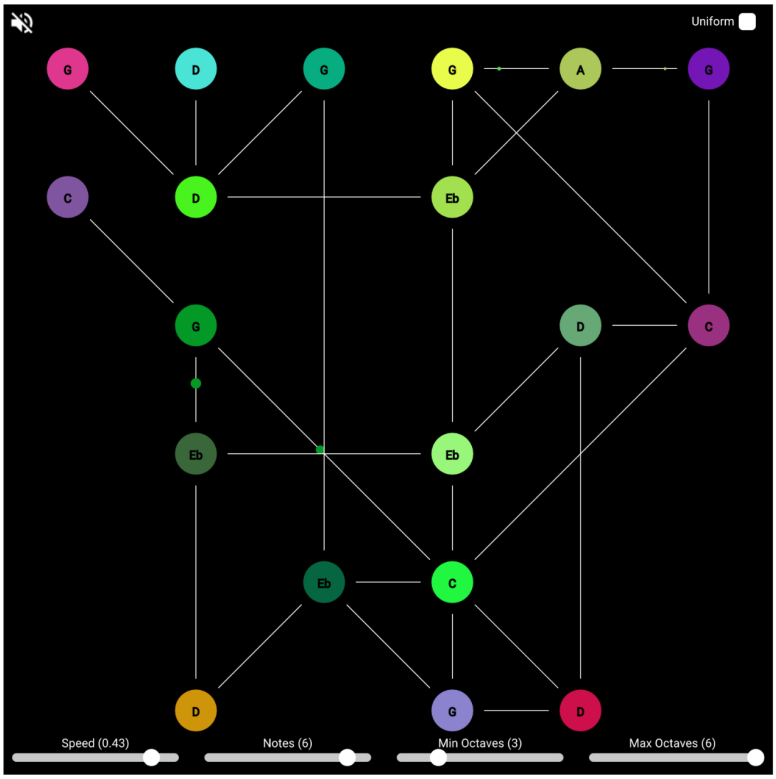


Alto

Alto is a generative system that produces sounds and random networks based on Boolean networks & Proprioceptive neurons

Proprioception

Proprioception refers to the object or body's ability to perceive its own position in space. For example, proprioception enables a person to close their eyes and touch their nose with their index finger.

Other examples of proprioception include:

- Knowing whether feet are on soft grass or hard cement without looking (ev1en while wearing shoes)
- Throwing a ball without having to look at the throwing arm

A self-referential system (the referencing of movements to their variation) is more dependable,

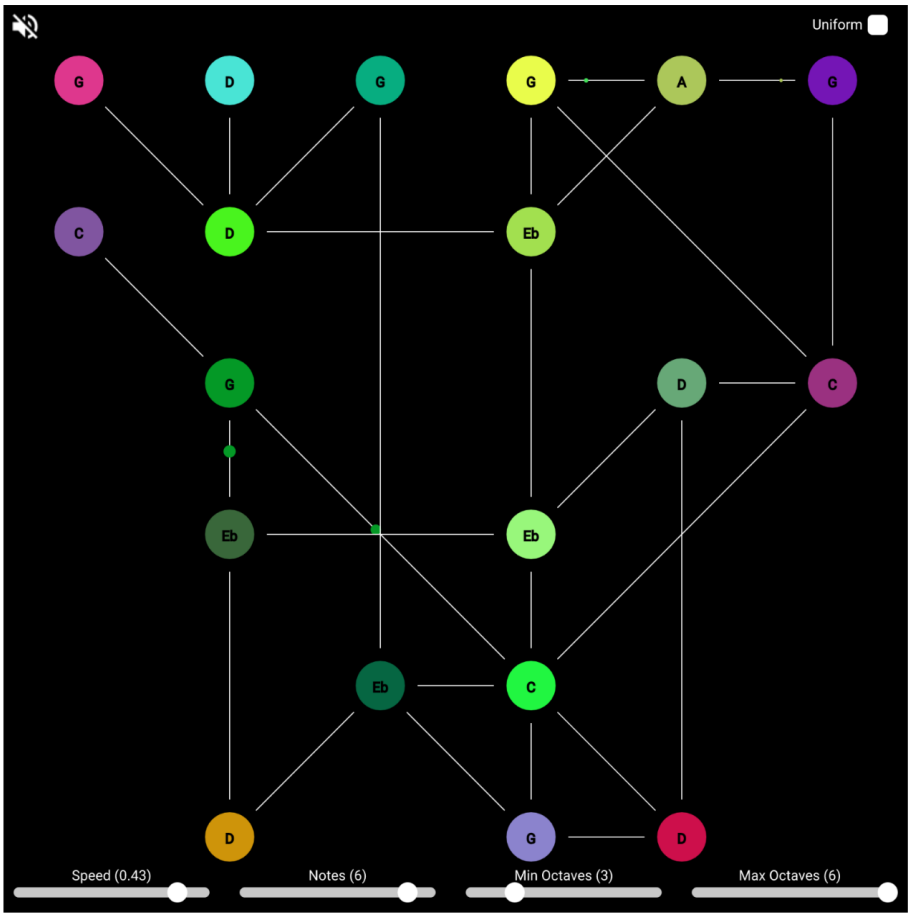
more fundamental to our spatial experience

Self-referential orientation is known to be the basis of many living beings' abilities to orient.

Boolean Networks

The Boolean network consists of a discrete set of Boolean data type Which is a data type that has one of two possible values (0 or 1), each of them has a Boolean function assigned to it which takes inputs from a subset of those variables and output that and determines the state of the variable it is assigned to. This set of functions in effect determines a topology (connectivity) on the set of variables, which then become nodes in a network.
Boolean networks are often used in microbiology to model regulatory networks

Instructions



- Speed: Change the speed of the moving cells to get a faster or slower sequence of sounds
- Notes: Change the notes switch to get different notes from 7 different scales
- Min/Max Octaves: Change min/max octave between C2 & C6
- Uniform: Turn on/off uniform toggle on the top left, in order to switch between uniform cell movements or non-uniform cell movements

References

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- https://openprocessing.org/sketch/559369
- Multifaceted Dynamics of Janus Oscillator Networks - https://journals.aps.org/prx/pdf/10.1103/PhysRevX.9.011017
- Classification of Random Boolean Networks - Carlos Gershenson https://arxiv.org/ftp/cs/papers/0208/0208001.pdf
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