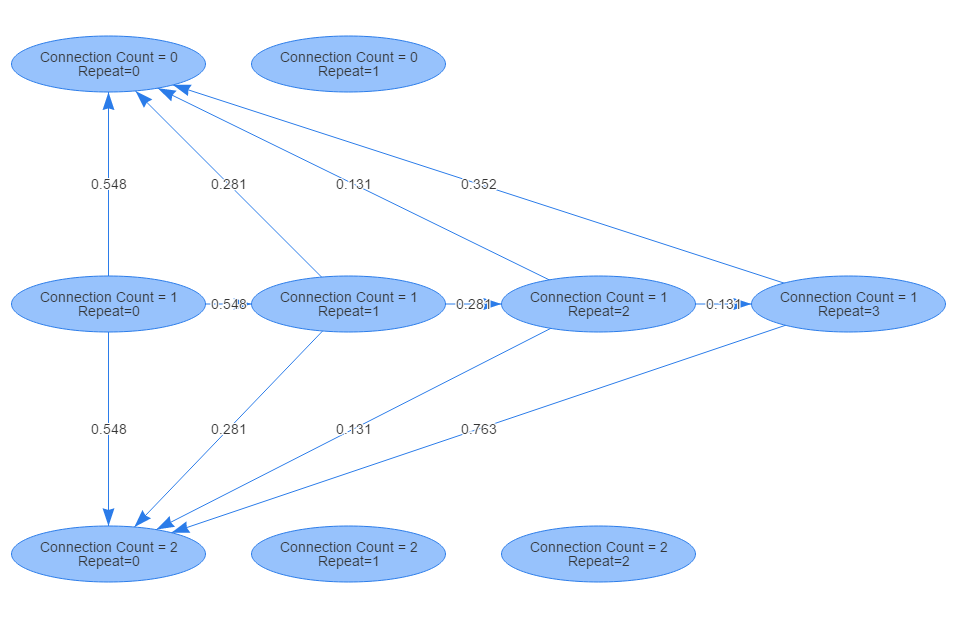
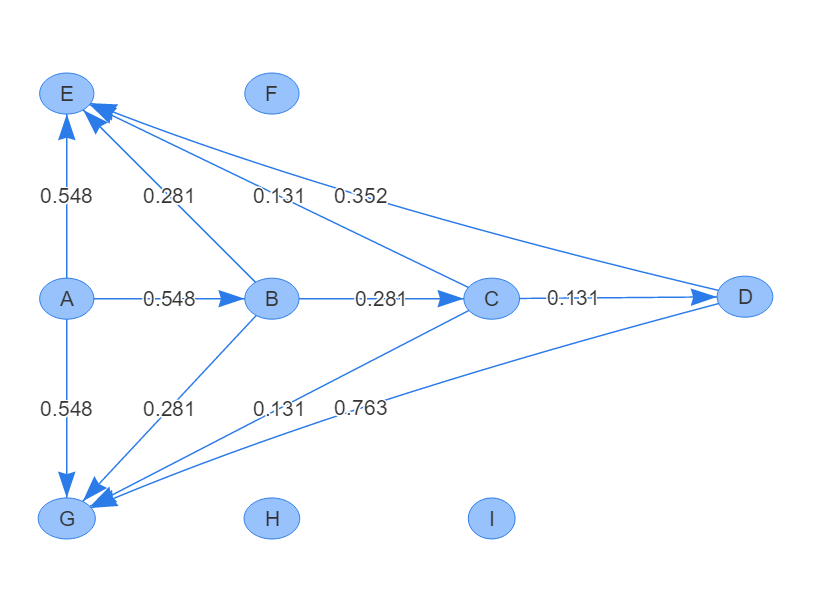
As far as I understand this is the definition of a markov chain:

Basically the probability of going to state is only dependent on which state we were one step before. This is actually the case for my model. This is the model once again:



Now look at it this way:



Lets consider . We have:

This value is independent on how we arrived at B. That means:

**Additional Notes:** In the picture above the numbers written on the edges are just random numbers. In the actual model the numbers outgoing from each node add up to 1.

**Additional Notes:** The actual graph looks something like this. I’ve omitted a lot of the edges for simplicity:

