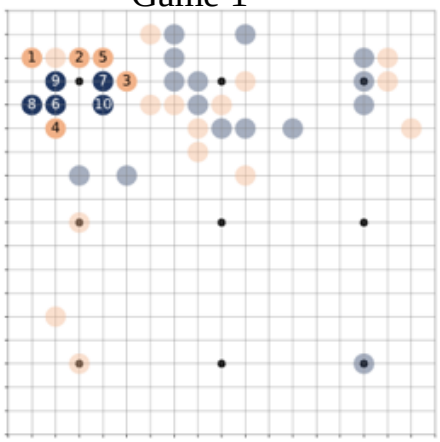
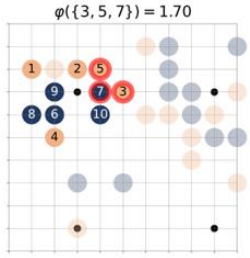
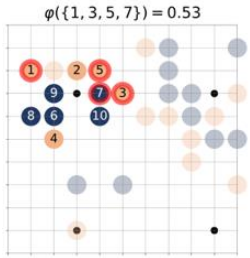
Game 1

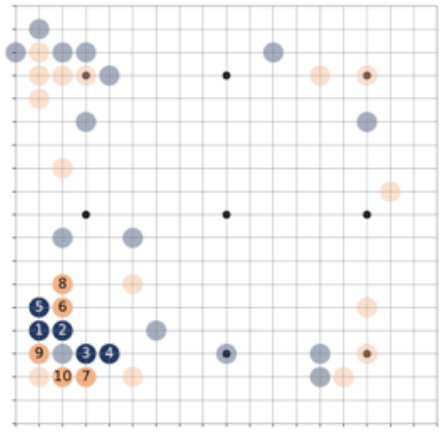


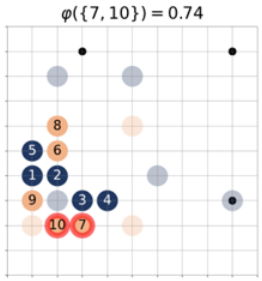


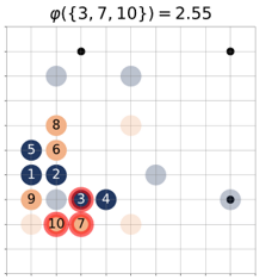


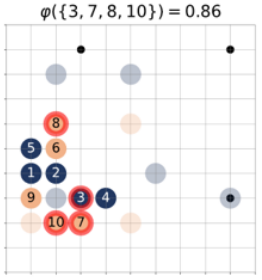
(1) $\varphi(\{3,5,7\}) = 1.70$ and $\varphi(\{1,3,5,7\}) = 0.53$. The shape pattern is a "shoulder-hit" pattern, therefore, white stones are in advantage in this shape pattern. However, the white stone 1 makes the opportunity for black stones to break the union of white stones, therefore,$\varphi(\{1,3,5,7\}) < \varphi(\{3,5,7\})$.

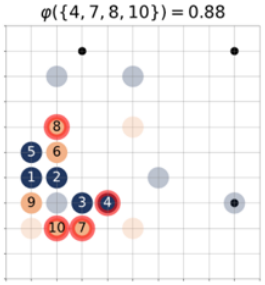
Game 2

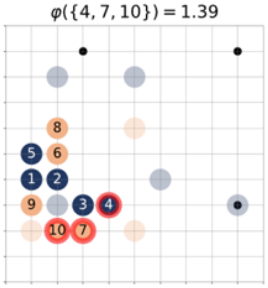












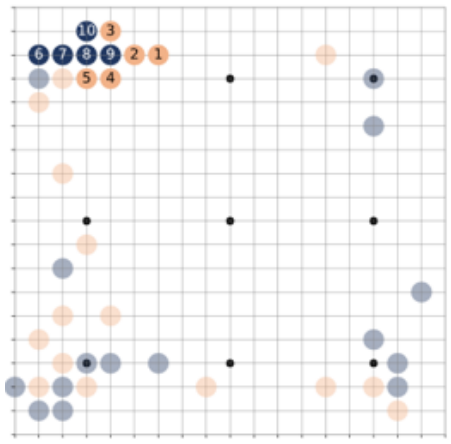
(1) $\varphi(\{7,10\}) = 0.74$ and $\varphi(\{3,7,10\}) = 2.55$. The combination of white stones 7 and 10 is not a good strategy. However, the move of black stone 3 makes the combination of white stones {7, 10} form a combat configuration. The shape pattern {3,7,10} is a typical tactical pattern known as "shoulder-hit." Therefore, shape pattern {3,7,10} is more advantageous for white stones than shape pattern {7, 10}.

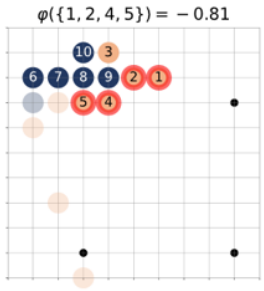
(2) $\varphi(\{7,10\}) = 0.74$ and $\varphi(\{4,7,10\}) = 1.39$. Likewise, the move of black stone 4 also makes the combination of white stones {7, 10} form a combat configuration. The shape pattern {4,7,10} is also a "shoulder-hit" pattern, and is more advantageous for white stones than shape pattern {7, 10}. However, the position of black stone 4 in the pattern {4, 7, 10} is superior to the black stone in the pattern {3, 7, 10}. Therefore, $\varphi(\{4,7,10\}) < \varphi(\{3,7,10\})$.

(3) $\varphi(\{3,7,10\}) = 2.55$ and $\varphi(\{3,7,8,10\}) = 0.86$. Although the shape pattern {3,7,10} is a "shoulder-hit" pattern, due to the problematic placement of white stone 8, black stones get the opportunity to split the white combinations {7, 8, 10}. Therefore, shape pattern {3,7,8,10} have a lower advantage score than shape pattern {3,7,10}.

(4) $\varphi(\{4,7,10\}) = 1.39$ and $\varphi(\{4,7,8,10\}) = 0.88$. Although the shape pattern {4,7,10} is a "shoulder-hit" pattern, due to the problematic placement of white stone 8, black stones get the opportunity to split the white combinations {7, 8, 10}. Therefore, shape pattern {4,7,8,10} have a lower advantage score than shape pattern {4,7,10}.

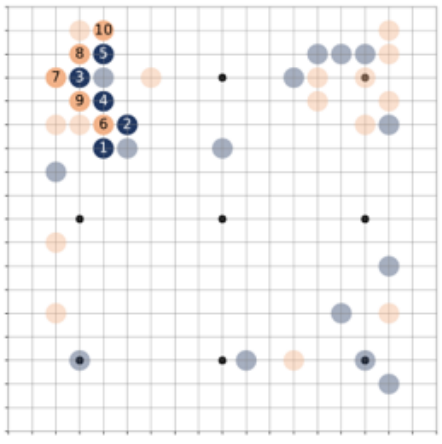
Game 3

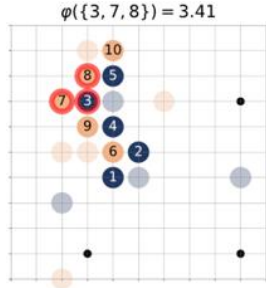




(1) $\varphi(\{1,2,4,5\}) = -0.81$. The shape pattern {1,2,4,5} is advantageous for black stones, because in this case white stones form a combat configuration too slowly.

Game 4





(1) $\varphi(\{3,7,8\}) = 3.41$. The shape pattern {3,7,8} is advantageous for white stones, because it is a typical formalized series of moves (Dingshi), known as "corner regular form."