

# 基于强化学习的黑白棋的设计与实现

Design and Implementation of Othello Based on Reinforcement Learning

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# Outline1



# Backgrounds

- 11111111111111

- 22222222222222

- ① 3333333

- ② 44444444

First Item Description of first item

Second Item Description of second item


Third Item Description of third item

Forth Item Description of forth item



# My Photo



: hahahaha...

Emmm...

## Sequence Tagging Loss

$$\mathcal{L}_p = - \sum_{i=1}^S \sum_{j=1}^N p_{i,j} \log(\hat{p}_{i,j})$$



## Language Classifier Loss

$$\mathcal{L}_a = - \sum_{i=1}^S l_i \log(\hat{l}_i)$$

## Bidirectional Language Model Loss

$$\mathcal{L}_l = - \sum_{i=1}^S \sum_{j=1}^N \log(P(w_{j+1}|f_j)) + \log(P(w_{j-1}|b_j))$$

# References

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