

Prisoners

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Abstract. undone we need to write something

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1 Introduction

The basic prisoners dilemma is a well known phenomena. [1] ran his well known experiments on the two person prisoner's dilemma... undone

The N-Person prisoners' dilemma involves n people participating in the dilemma.

The take home points are: 1. When prisoners only have one choice per turn, most algorithms descend into the tragic valley. When each prisoner has $n-1$ choices, it is relatively easy to stay on top of the reciprocity hill.

2. Context is crucial in overcoming the tragic valley. History, value (distance in lit).

3. Adaptive MARL can rise out of the tragic valley.

4. Optimistic tit for tat (and tit for tat) vs. standard reinforcement learning descend into the valley.

The human brain is the basis of intelligent behaviour, including with biology (discussed in section 3), but the overall secDiehl. The simulations use spiking neurons with dynamic thresholds for some of the neurons. A three population topology is

relatively easily using these mechanisms. Biological plausibility and future work are discussed in section 3.

2 Literature Review

The work reported in this paper is the fourth in a series of papers using biologically motivated simulated neurons and learning rules. The first two papers in the series [2, 3] were based on simulations that used a feed forward topology with input neurons connected to category neurons. The third was based on competitive topology with three populations [4]. This topology and mechanism are derived from work by Diehl and Cook [5]. This is the basic topology, shown in described below.

3 Discussion

4 Conclusion

So, it is clear that these adaptive spiking neuron systems learning with STDP can be used for categorisation. This is not novel, but the basics of this mechanism have been described above and it has been extended to a novel digit recognition task. As a machine learning

neurobiology to see how it is done in brains and in petri dishes. It is quasi-neurobiologically plausible learning.

References

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