UNIVERSITY OF BIRMINGHAM

School of Computer Science
College of Engineering and Physical Sciences

MSc. Project

Play Curling with Deep Reinforcement Learning

Submitted for the degree of MSc.
Advanced Computer Science

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1 Abstract

Placeholder.

2 Introduction

hello! (Department for Transport 2014)

3 Preliminaries

$d = p * g$

$$dql = -\frac{1}{2}\log n$$

4 Theory

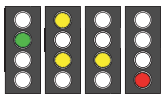

Figure 4.1: *Reference Driver Machine Interface (Department for Transport 2014)*

5 Implementation

EuroRadio Protocol Steps that an ERTMS Entity would undertake to establish a connection

T: Train, R: Radio Block Centre, K_{MAC}: Train Key, KS_{MAC}: Session Key

1: $T \rightarrow R$: {ETY,MTI←AU1, DF←0, Sender ETCS ID, Safety Feature, R_T}. DF, Padding))}

6 Experiment

Threat	EuroRadio
Repetition	×
Deletion	×
Insertion	✓
Re-sequencing	×
Corruption	✓
Delay	×
Masquerade	✓

7 Discussion

- 3DES – Triple DES
- 3G – Third Generation
- AES – Advanced Encryption Standard
- ALE – Adaptation Layer Entity

8 Conclusion

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References

Department for Transport (2014), 'Rail Trends, Great Britain 2013/14', Available: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/363718/rail-trends-factsheet-2014.pdf. Online; accessed 10 July 2015.

9 Appendix

9.1 Appendix I.