

# Learning to Dispatch: A Reinforcement Learning Framework for Train Networks

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Abstract.

## 1 Introduction

## 2 Problem Background

### 2.1 Train Dispatch Problem

### 2.2 Deep Reinforcement Learning

### 2.3 Graph Neural Networks

## 3 Related Work

I am [1]

## 4 Formulation

### 4.1 Graph Formulation

### 4.2 State Space

### 4.3 Action Space

## 5 Results

## 6 Conclusion and Future Work

## 7 Contributions

## 8 Acknowledgements

## 9 Appendix

## References

1. F.-X. Devailly, D. Larocque, and L. Charlin, “Ig-rl: Inductive graph reinforcement learning for massive-scale traffic signal control,” *IEEE Transactions on Intelligent Transportation Systems*, vol. 23, no. 7, p. 7496–7507, Jul. 2022. [Online]. Available: <http://dx.doi.org/10.1109/TITS.2021.3070835>