

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

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*Abstract—*

## I. INTRODUCTION

## II. PROBLEM BACKGROUND

A. *Train Dispatch Problem*

B. *Deep Reinforcement Learning*

C. *Graph Neural Networks*

## III. RELATED WORK

I am [1]

## IV. IMPLEMENTATION

A. *State Space*

B. *Action Space*

## V. RESULTS

## VI. CONCLUSION AND FUTURE WORK

## VII. CONTRIBUTIONS

## VIII. ACKNOWLEDGEMENTS

## IX. 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>