

SYSTEM AND METHOD FOR ROUTING OPTIMIZATION

ABSTRACT

Methods, systems, and apparatus, including computer programs encoded on computer storage media, for determining routing using reinforcement learning (RL) are provided. One of the methods includes: initializing a state of an RL model based on a routing solution, wherein the RL model comprises a plurality of improvement actions for applying to the state; applying one or more of the plurality of improvement actions to the state to obtain updated routing solutions until a predetermined condition is satisfied; applying a perturbation action to obtain a perturbed routing solution and feeding the perturbed routing solution back to the RL model for the RL model to perform the applying one or more of the plurality of improvement actions according to the policy; and determining a routing solution with a minimum cost from the updated routing solutions.

Figure 1