Base Station Deployment Scenario

Specifically, we focus on the millimeter-wave (mmWave) base station (BS) deployment problem in an urban geometry, based on the application of a scenario sampling approach, previously introduced for ...

The explosive growth of the sixth-generation (6 G) wireless system necessitates efficient base station (BS) deployment to balance coverage, data rates, and ec

As a network designing application, we propose a Deep Q Network (DQN) framework, using the trained cGAN, for optimal base station (BS) deployment in the network. Compared to conventional ray ...

This paper presents a 3D UBS deployment framework for restoring cellular connectivity in an emergency scenario when the specific position of the UEs is not available.

Stations are installed on rooftops, towers, or elevated structures. Microcell and small cell technologies are deployed to minimize coverage shadows.

In this paper, we present a mathematical model for FBS deployment in large-scale scenarios. The model is based on a location set covering problem and the goal is to minimize the number of FBSs by ...

In this paper, we investigate all these challenges and propose a novel deployment framework with the objective of maximizing the quality of communication service by dynamically ...

This thesis focuses on designing a deployment strategy for aerial base stations (aerial-BS) using the Deep Q-network (DQN) algorithm in dynamic service scenarios to improve wireless ...

We extract the horizontal deployment problem into the solution of UAV coverage rate and connectivity rate and calculate the optimal horizontal deployment coordinates of the UAV base ...

Dynamic service requirements are one of the critical factors affecting the deployment of aerial base stations. The current research focus is to fully consider the constantly changing service requirements ...

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