**DRL（利于allocation）**

***Deep Reinforcement Learning Based Green Resource Allocation Mechanism in Mobile Edge Network for Ubiquitous Power IoT***

基于Mobile edge computing 的 Green resource allocation资源消耗过大，DRL可以更好节约资源消耗和更好地分配绿色资源。

以最小化能源效率为目标，同时满足每个移动用户的需求，DRL定义了状态空间、行动空间和奖励功能

状态空间、行动空间、奖励功能具体定义

算法1

对比了在三种策略（DA、UC、DRL）下的能源消耗

Summary: Minimizing energy efficiency while ensuring the needs of each user. A well-trained network can achieve the goal of green energy-saving, also solve the effective resource allocation problem, and the results achieved the lowest energy efficiency compared with the other two strategies.

***Efficient Adaptive Resource Provisioning for Cloud Applications using Reinforcement Learning***

Reinforcement learning (RL) is a natural solution for adaptive decision making problems such as the one we have described.

强化学习(RL)是适应性决策问题的自然解决方案

RL based solutions are application agnostic which means that different applications can use the same algorithm without customized settings or parameters.

基于RL的解决方案与应用程序无关，这意味着不同的应用程序可以使用相同的算法，而无需定制设置或参数

While several such solutions exist already [1], they suffer from issues such as slow convergence, non scalability and poor performance during the learning period.

虽然已经存在几个这样的解决方案（RL)，但它们存在诸如收敛速度慢、不可扩展性和学习期间性能不佳等问题。

Another issue is the large amount of time taken for training and poor performance of the algorithm during the training phase.

另一个问题是训练时间长，算法在训练阶段表现不佳。

**DRL是解决以上DL问题的方法之一**

Deep Reinforcement learning (DRL) is an emerging area of research that approximates the Q-values using a deep neural network.

深度强化学习(DRL)是一个新兴的研究领域，使用深度神经网络近似q值。

**Q学习还分为快速Q学习和常规Q学习**

Speedy Q-learning converged faster, but the final cost obtained was slightly higher than what regular Q-learning gave.

**快速q学习**收敛更快，但最终获得的成本略高于**常规q学习**给出的成本。