



Augmented reality

Virtual reality

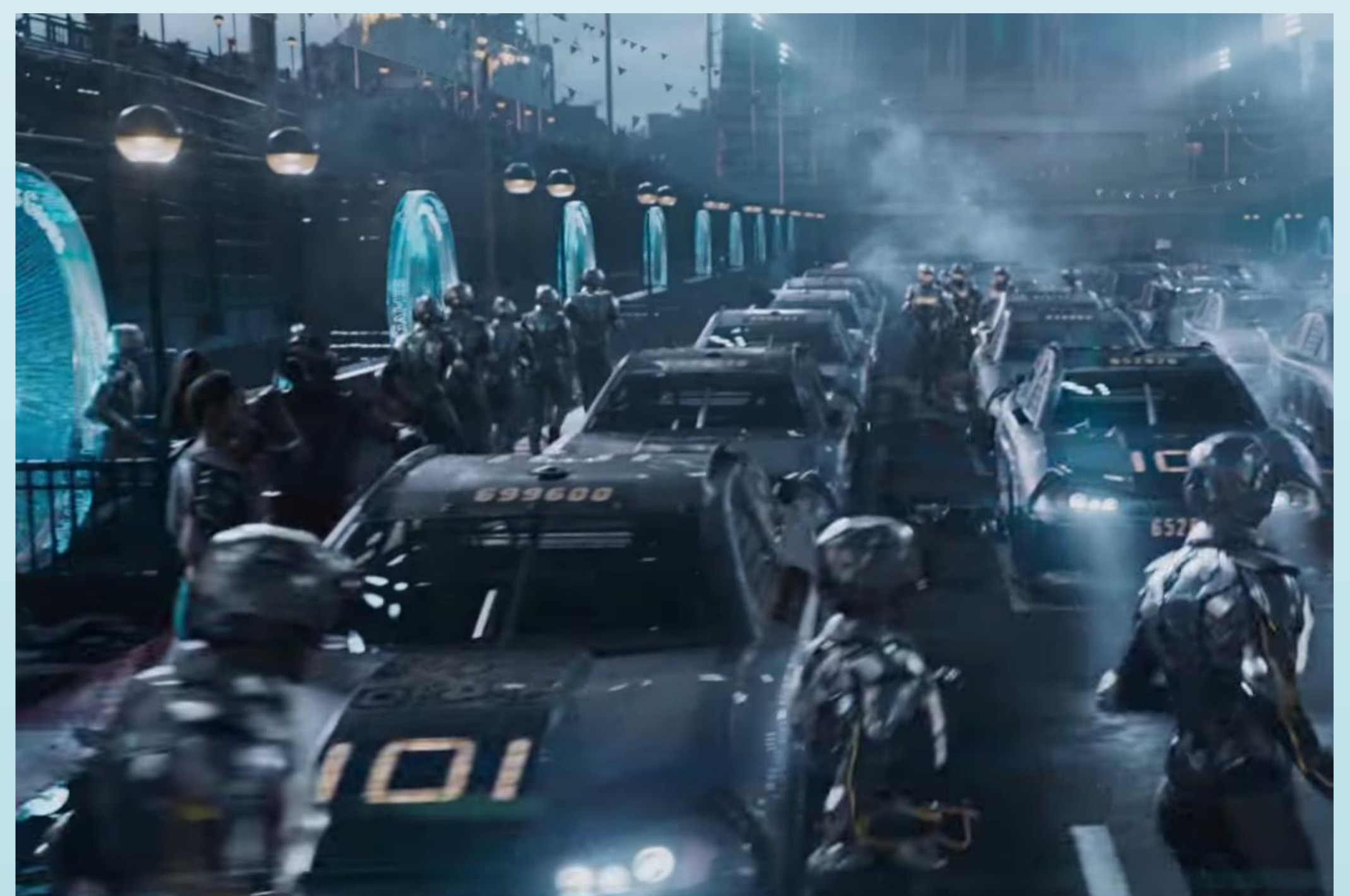
Artificial Intelligence for Cache-aided Mobile Edge Computing

Zhong Yang, Yuanwei Liu, Kok Keong Chai, Yue Chen

School of Electronic Engineering and Computer Science, Queen Mary University of London

Augmented reality (AR), virtual reality (VR), real-time online gaming and high-speed video streaming in 5G require unprecedented high access speed and low latency.

- Artificial intelligence provides a potential solution for efficient resource allocation in MEC networks to fulfill the above challenging demands.
- Reinforcement learning is adopted to maximize resource allocation gains.



A novel resource allocation scheme is proposed, which is capable of:

- Efficiently offering cache and computation service for latency-sensitive and computation-intensive tasks.
- Minimizing the sum energy consumption utilizing a Markov decision process model.
- Learning from the historical allocation experience and automatically improve allocation efficiency .

