



# From Few to More: Large-scale Dynamic Multiagent Curriculum Learning

Weixun Wang<sup>1</sup>\*, Tianpei Yang<sup>1</sup>\*, Yong Liu<sup>2</sup>\*, Jianye Hao<sup>1,3</sup>,  
Xiaotian Hao<sup>1</sup>, Yujing Hu<sup>4</sup>, Yingfeng Chen<sup>4</sup>, Changjie Fan<sup>4</sup>,  
Yang Gao<sup>2</sup>

<sup>1</sup> College of Intelligence and Computing, Tianjin University,

<sup>2</sup> National Key Laboratory for Novel Software Technology, Nanjing University,

<sup>3</sup> Noah 's Ark Lab, Huawei,

<sup>4</sup> NetEase Fuxi AI Lab,

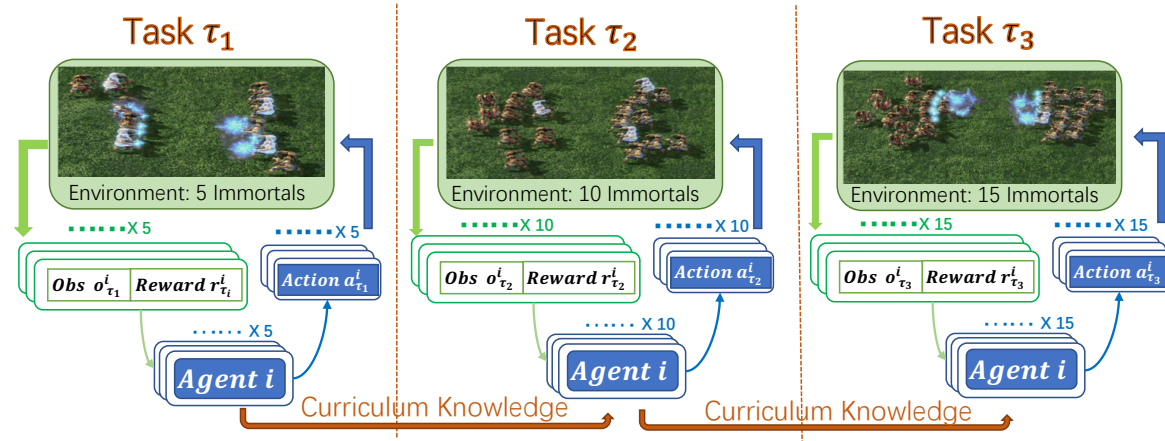
\* Equal contribution



FUXI-Lab

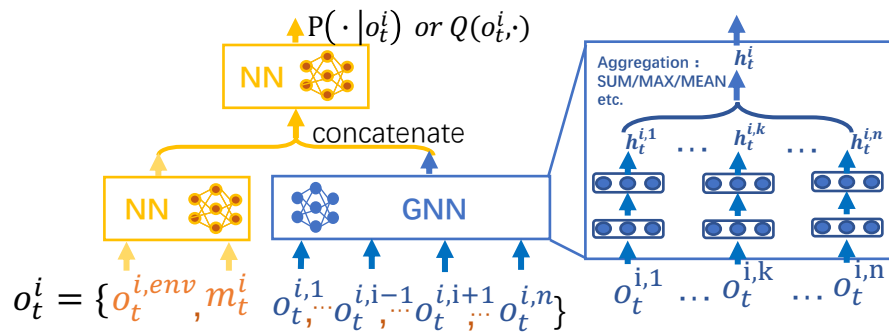


# From Few to More: Large-scale Dynamic Multiagent Curriculum Learning

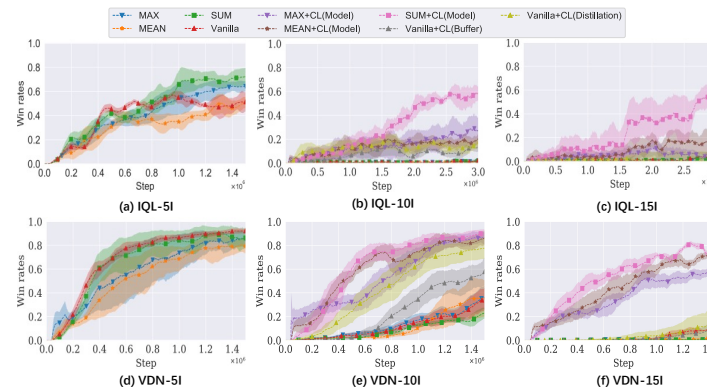


Knowledge Transfer across  
Dynamic Multiagent Curriculum Learning (DyMA-CL) :

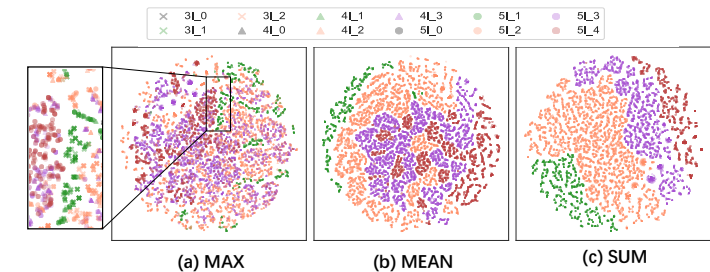
1. Buffer Reuse
2. Curriculum Distillation
3. Model Reload (Dynamic Number Agent Network)



The network structure of DyAN



Average win rate of IQL and VDN  
on DyMA-CL.



Embedding analysis for  
different aggregation mechanisms