

Figure 1: Comparison of MIC with CPO in more complex and continuous environments. MICE achieves better constraint satisfaction while maintaining policy performance comparable to CPO.

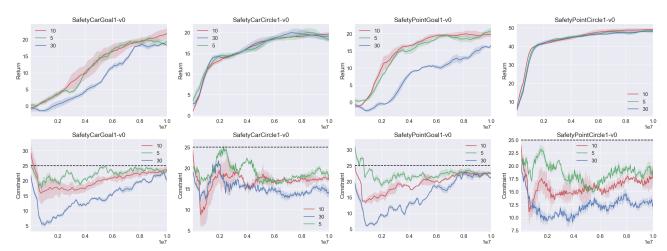


Figure 2: Sensitivity analysis of MICE algorithm for different  $N_k$  in KNN. A larger  $N_k$  leads to lower constraint violations but more conservative policy, as it considers more unsafe states in memory. Conversely, a smaller  $N_k$  improves policy performance but increases constraint. In this work, we set  $N_k = 10$  to balance constraint satisfaction and policy performance.

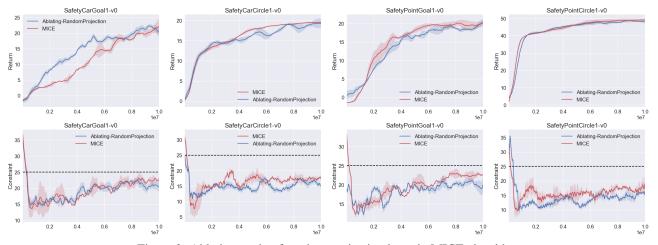


Figure 3: Ablation study of random projection layer in MICE algorithm.