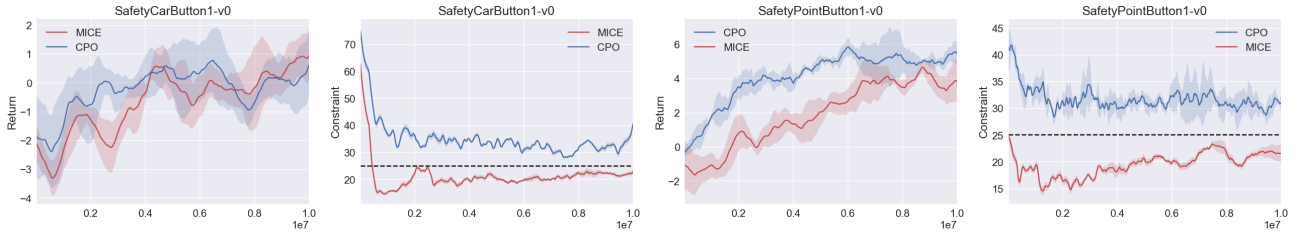

Figure 1: Comparison of MICE with CPO in more complex and continuous environments. MICE achieves better constraint satisfaction while maintaining policy performance comparable to CPO.

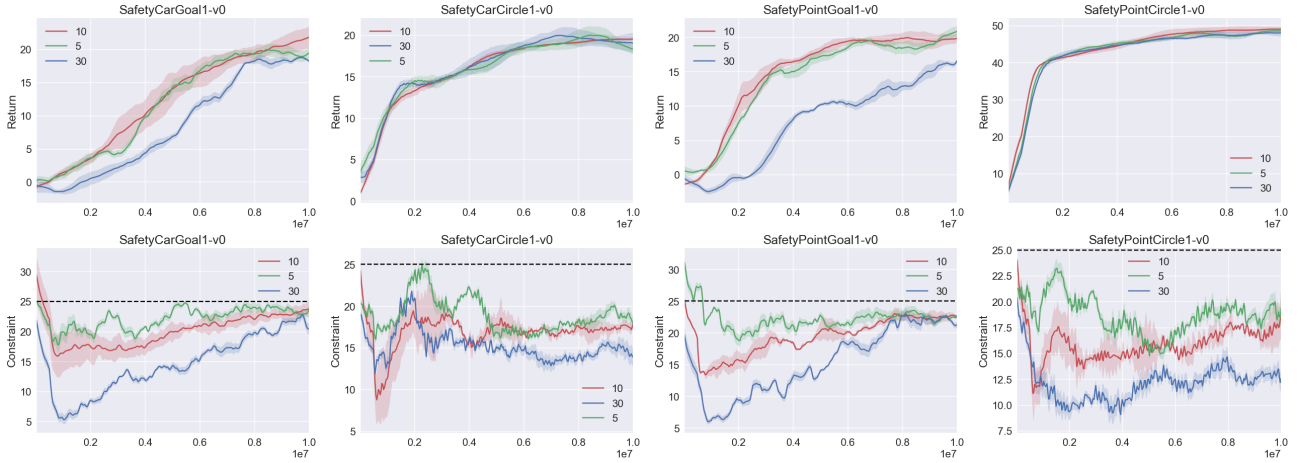

Figure 2: Sensitivity analysis of MICE algorithm for different N_k in KNN. A larger N_k leads to lower constraint violations but more conservative policy, as it considers more unsafe states in memory. Conversely, a smaller N_k improves policy performance but increases constraint. In this work, we set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

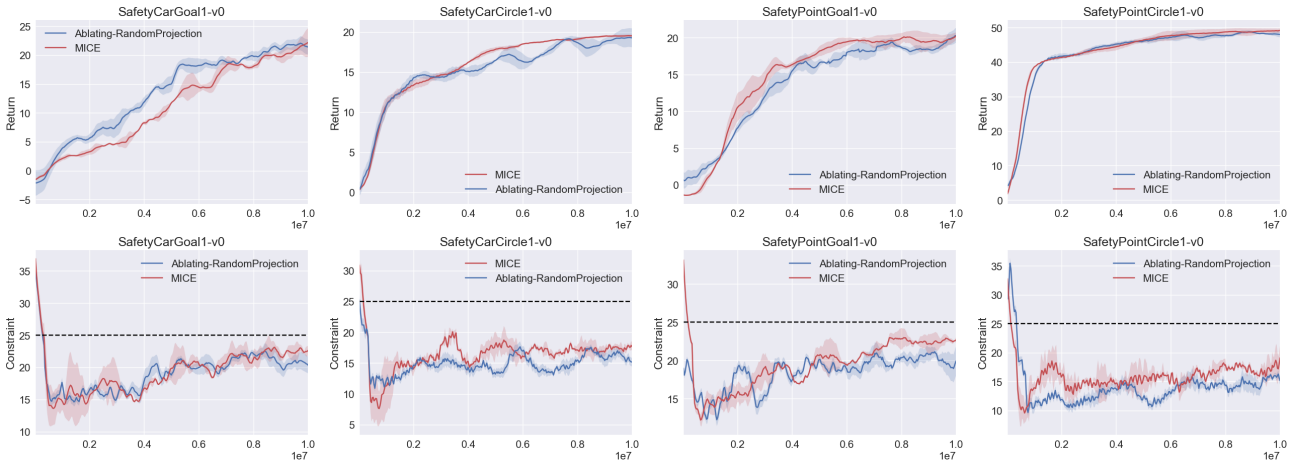

Figure 3: Ablation study of random projection layer in MICE algorithm. Random projection has a limited impact on overall policy performance and constraint satisfaction, and it can reduce the computational overhead of KNN.