## **Supplementary Material: Code**

## Introduction

This folder contains the code implementation of a plug-and-play T-HCl method in our paper Fast Counterfactual Inference for History-based Reinforcement Learning.

In our main text, there are totally 3 types of tasks. For convenience in running the code, we select the Level 1-2 Maze tasks as the representatives, since their Python dependencies are easy to install (the other tasks require BabyAl and Coppeliasim simulator). Before the camera ready, the complete code will be available at an anonymous repository.

## **Dependencies**

Concrete dependencies include:

(We tested this setting in a newly created miniconda environment in Windows 10 and ubuntu 18.04)

-Python 3.6 (python 3.5+ should be ok but not tested)

-Numpy 1.17

-Pytorch 1.10.0

## **Running the Code**

Level-1 Maze task:

python main.py -level 1

Level-2 Maze task:

python main.py -level 2

Hope our code can help you better understand our method!