RL (1)

SCITAS server connection

0. **Connect to EPFL's VPN**

1. **Connect to the online server**

```
ssh -X EPFL_username@izar.hpc.epfl.ch
```

2. **Type your password**

```
your_password
```

3. Create a new environment (in the root directory)

```
python -m venv venvs/env_rl
```

3. **Activate the environment**

```
source venvs/env_rl/bin/activate
```

- To deactivate the environment

```
deactivate
```

- To quit the terminal

```
exit
```

4. **To send data to the server: Go to the folder on your laptop and run the command**

```
rsync -avz /path/to/my_rl_project EPFL_username@izar.epfl.ch:/path/to/target/folder
```

5. **Prepare a batch script (for Slurm)**

- Give a name to the script like "***run_rl_job.sh***"
- Type `nano` in the command line, copy the code (type `crtl ^ + X`), name the file (type `Enter`)

```
#!/bin/bash
#SBATCH --job-name=rl_training
#SBATCH --output=rl_training_%j.out
#SBATCH --error=rl_training_%j.err
#SBATCH --time=04:00:00        # Adjust time as needed
#SBATCH --mem=8G               # Adjust memory as needed
#SBATCH --cpus-per-task=4      # Adjust cores as needed
#SBATCH --gres=gpu:1           # (If you need a GPU - remove this if CPU only)

# Load modules if needed (you may not need this if your env handles it)
# module load python/3.X.X

# Activate your environment
source /home/EPFL_username/venvs/env_rl/bin/activate

# Move to your project directory
cd /home/EPFL_username/name_directory_where_your_code_is

# Run your code
python main.py --env MountainCarContinuous-v0
```

6. Once the script is ready

```
sbatch run_rl_job.sh
```

7. Monitor and Debug

```
squeue -u EPFL_username
```

8. To **view the files**, you can use:

- `cat` (if the file is small and you want to dump everything):

```
cat rl_training_<jobid>.out
```

- `less` (better for scrolling through longer files):

```
less rl_training_<jobid>.out
```

➔ Use arrow keys to navigate, `q` to quit.

- `tail` (to quickly check the **end** of the file):

```
tail rl_training_<jobid>.out
```

➔ To keep watching the file **live as it's being written**:

```
tail -f rl_training_<jobid>.out
```

- `head` (to check the **top** of the file):

```
head rl_training_<jobid>.out
```

9. To delete all the files finishing in `.out` or `.err`

```
rm -r *.out
rm -r *.err
```

```
Pendulum-v1
2620138

MountainCarContinuous-v0
2620101
```