



The Neural MMO Platform for Massively Multiagent Research

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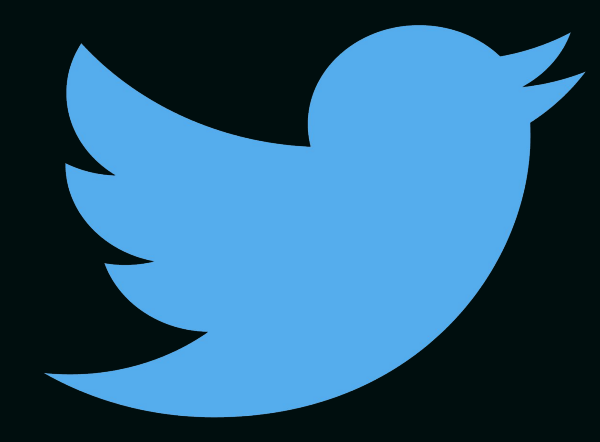
Project Page
neuralmmo.github.io



Community Discord
discord.gg/BkMmFUC



Source Code
jsuarez5341/neural-mmo



Twitter
@jsuarez5341

Neural MMO is an open-source and computationally accessible simulation platform for agent-based intelligence research. Environments are procedurally generated and configurable for a variety of problem scales -- from simple tasks involving few agents for one minute to multimodal tasks involving a thousand agents for a couple of hours.

1: Generate environments for your setting

Configure simulation parameters and define tasks

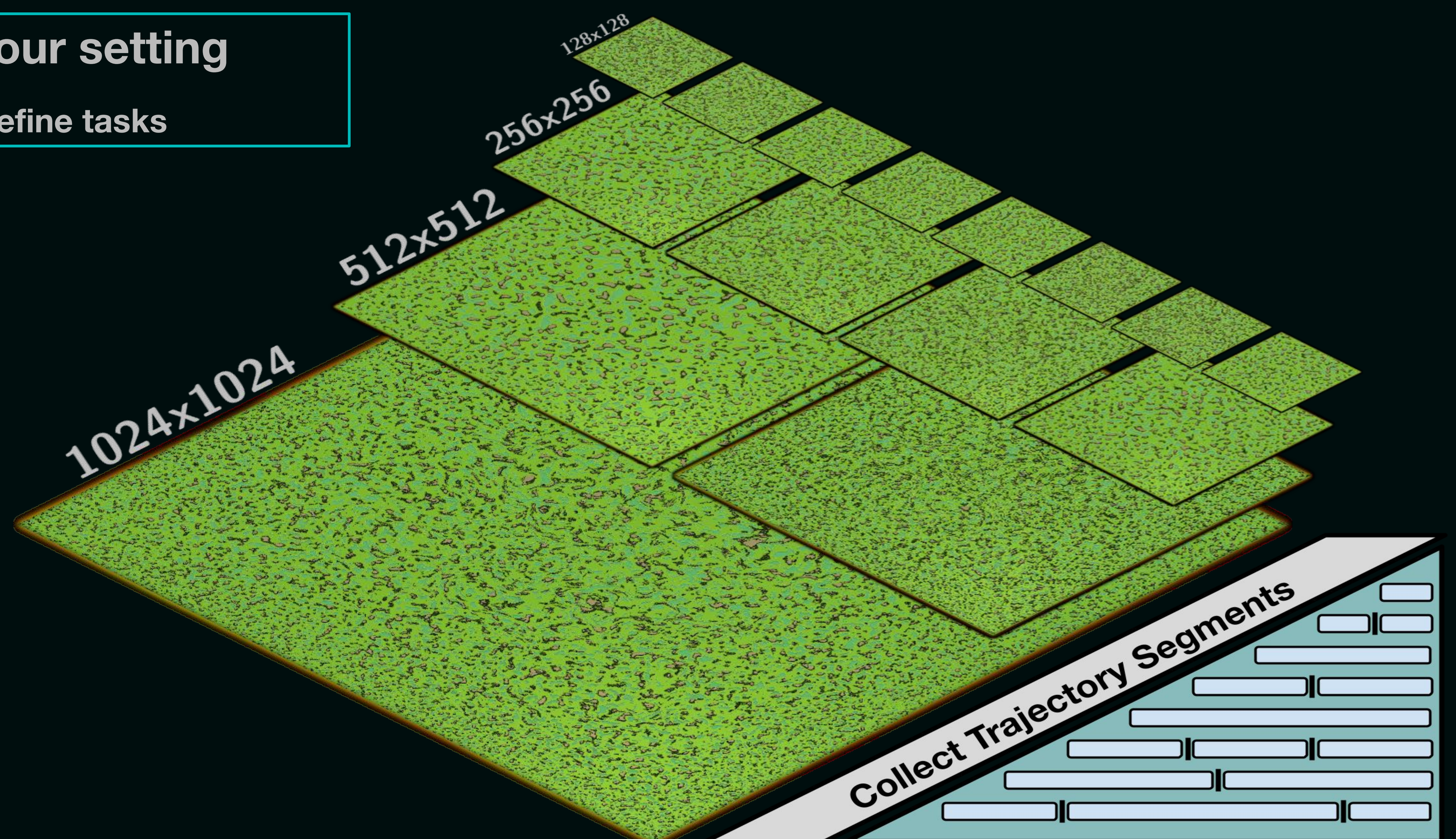
```
class ExampleCustomizeGameSystemsConfig(SmallMaps, config.Resource, config.Progression):
    # Example core config customization
    NMOR = 512
    NENT = 128

    # Example terrain generation customization
    TERRAIN_CENTER = 512
    TERRAIN_WATER = 0.40
    TERRAIN_GRASS = 0.55

    # Example progression system customization
    PROGRESSION_BASE_XP_SCALE = 10
    PROGRESSION_CONSTITUTION_XP_SCALE = 2
```

Score points based on the highest tier task completed in each achievement category.
Easy = 4 points **Normal** = 10 points **Hard** = 25 points (100 total points possible)

Eliminate the Competition	Secure an Advantage	Travel the Lands	Forage for Resources
Deal the final blow in PVP combat	Defeat high-level NPCs to acquire defensive armor	Measured in L _∞ distance from spawn with 1m = 1 tile	Gather resources to increase mean fishing and hunting level
Defeat another player	Acquire Lvl 1 Equipment	Explore 32 Meters	Attain Skill Lvl 20
Defeat three players	Acquire Lvl 10 Equipment	Explore 64 Meters	Attain Skill Lvl 35
Defeat six players	Acquire Lvl 20 Equipment	Explore 127 Meters	Attain Skill Lvl 50



2: Develop agents for your tasks

We provide an RLib wrapper for training and a scripting API
 Evaluate skill rating (SR) via tournaments vs. baselines



500 SR

900 SR

1500 SR

Unrated



1150 SR

3: Visualize Behaviors

We provide an interactive 3D Unity client and a 2D overlay API
 Monitor additional aggregates statistics via WanDB integration

