Appendix

1 Uncertainties

1.1 u^σ uncertainties

Here we present the u^σ values obtained from training the MuJoCo environments with parallel module composition. The results can be seen in Figure 1.

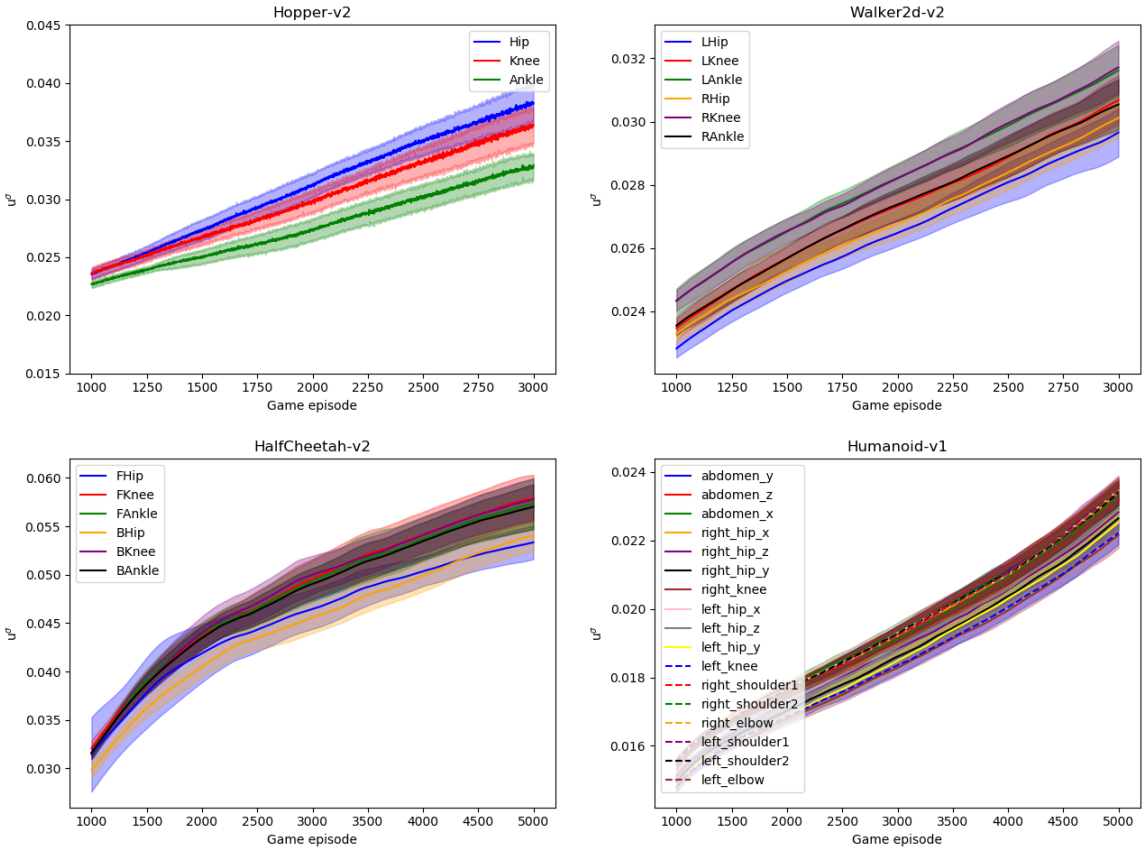

Figure 1: u^σ uncertainties for MuJoCo environments

1.2 u^q uncertainties

Here we present the u^q values obtained from training the MuJoCo environments with parallel module composition. The results can be seen in Figure 2.

2 Inferred structures

In Table 1 we present the compositional structures inferred from u^σ and u^q values. In Table 2 we present the configuration used to estimate the effect of the module composition.

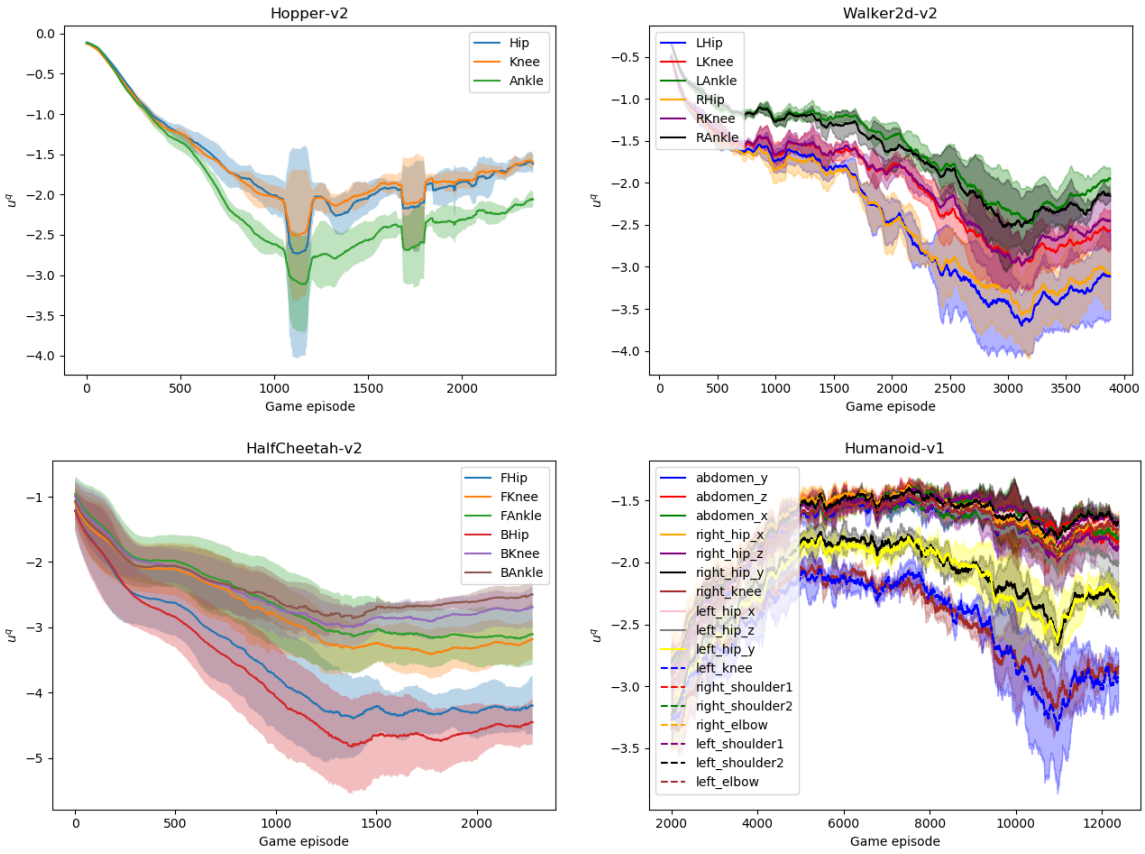

Figure 2: u^σ uncertainties for MuJoCo environments

	u^σ	u^q
Hopper	{{Ankle},{Knee,Hip}}	{{Ankle},{Knee,Hip}}
Walker2d	{{LHip},{RHip}, {LKnee,RAnkle}, {LAnkle,RKnee}}	{{LHip,RHip}, {LKnee,RKnee}, {LAnkle,RAnkle}}
Cheetah	{{FHip,BHip}, {FKnee,BKnee, FAnkle,BAnkle}}	{{FHip,BHip}, {FKnee,BKnee, FAnkle,BAnkle}}
Humanoid	{{RKnee,LKnee}, {RHip$_y$,LHip$_y$}, {RHip$_z$,LHip$_z$}, {Abdomen$_x$,Abdomen$_y$, Abdomen$_z$, RHip$_x$, RShoulder1, RShoulder2, LHip$_x$, LShoulder1, LShoulder2 RElbow, LElbow}}	{{RKnee,LKnee}, {RHip$_y$,LHip$_y$}, {Abdomen$_x$,Abdomen$_y$, Abdomen$_z$, RHip$_x$, RHip$_z$, RShoulder2, LHip$_z$, RShoulder1, LHip$_x$, LShoulder1, LShoulder2, RElbow, LElbow}}

Table 1: Module composition structures (c) obtained as a result of clustering uncertainty estimations based on u^σ and u^q values.

	Real	Inversed u^{σ}	Inversed u^{q}
Hopper	{{Hip},{Knee},{Ankle}}	{{Knee,Hip},{Ankle}}	{{Knee,Hip},{Ankle}}
Walker2d	{{LHip,RHip}, {LKnee,RKnee}, {LAnkle,LAnkle}}	{{LAnkle,RKnee}, {LKnee,RAnkle}, {RHip},{LHip}}	{{LAnkle,RAnkle}, {LKnee,RKnee}, {LHip,RHip}}
Cheetah	{{FHip,BHip}, {FKnee,BKnee}, FAnkle, BAnkle}}	{{FKnee,BKnee, FAnkle, BAnkle} {FHip,BHip}}	{{FKnee,BKnee, FAnkle, BAnkle} {FHip,BHip}}
Humanoid	{{RKnee,LKnee}, {RHip_x,LHip_x,RHip_y, LHip_y, RHip_z, LHip_z}, {Abdomen_x,Abdomen_y, Abdomen_z}, {RShoulder1,RShoulder2, LShoulder1, LShoulder2}, {RElbow,LElbow}}	{{Abdomen_x,Abdomen_y, Abdomen_z, RHip_x, RShoulder1, RShoulder2, LHip_x, LShoulder1, LShoulder2 RElbow, LElbow}, {RHip_z,LHip_z}, {RHip_y,LHip_y}, {RKnee,LKnee}}	{{Abdomen_x,Abdomen_y, Abdomen_z, RHip_x, RHip_z, RShoulder2, LHip_z, RShoulder1, LHip_x, LShoulder1, LShoulder2, RElbow, LElbow}, {RHip_y,LHip_y}, {{RKnee,LKnee}}

Table 2: Module composition structures (c) used to estimate the effect of the compositional structure.