

Supplementary Material

1 SUPPLEMENTARY DATA

2 SUPPLEMENTARY TABLES AND FIGURES

2.1 Figures

2.2 Tables

Table S1. The best model hyperparameters. The table is references in by the subsection 5.1.3.

Hyperparameter	MNIST (10x10)	S-MNIST SOM (16x16)	F-MNIST SOM (10x10)	Gests (16x16)	SOM
Unimodal parameteres					
σ_i	0.532	0.236	0.777	1.461	
σ_f	0.003	0.005	0.004	0.048	
ϵ_i	1.554	3.203	0.944	13.523	
ϵ_f	0.002	0.092	0.002	0.057	
α	0.245	0.06	0.264	0.081	
Reentry parameteres					
μ	1.	1.	1.	1.	
α_{train}	30.414	19.796	71.576	26.414	
α_{test}	2.605	5.477	0.727	1.256	
only BMU may be prediction	True	True	True	True	