The performance of all the different model configurations trained

Cell Type	Multibranch	Epochs	Additional Features	FPS	Seconds	Val Acc (mass)	Val Acc (force)
Simple RNN	No	25	-	60	45	35.50 ± 0.86	36.63 ± 0.44
LSTM	No	25	-	60	45	36.56 ± 0.71	44.5 ± 0.37
GRU	No	25	-	60	45	$\mathbf{60.33 \pm 0.52}$	$\mathbf{52.96 \pm 4.04}$
GRU	No	100	-	60	45	61.56 ± 0.62	64.26 ± 5.52
GRU	Yes	100	-	60	45	63.10 ± 1.79	61.17 ± 2.24
GRU	Yes	100	-	60	45	$\mathbf{63.10 \pm 1.79}$	$\mathbf{61.17 \pm 2.24}$
GRU	Yes	100	Angles	60	45	53.62 ± 3.31	53.00 ± 2.28
GRU	Yes	100	Distances	60	45	58.00 ± 1.80	57.57 ± 2.80
GRU	Yes	100	Angles & Distances	60	45	50.67 ± 4.21	56.90 ± 1.08
GRU	Yes	100	-	60	45	$\mathbf{63.10 \pm 1.79}$	$\mathbf{61.17 \pm 2.24}$
GRU	Yes	100	-	60	30	52.30 ± 1.91	$\mathbf{60.67 \pm 0.74}$
GRU	Yes	100	-	60	15	49.47 ± 0.66	53.60 ± 0.80
GRU	Yes	100	-	30	45	$\mathbf{66.40 \pm 5.31}$	$\mathbf{64.07 \pm 6.72}$
GRU	Yes	100	-	30	30	$\mathbf{57.53 \pm 0.61}$	$\mathbf{61.87 \pm 1.73}$
GRU	Yes	100	-	30	15	50.40 ± 0.70	52.70 ± 1.23
GRU	Yes	100	-	20	45	$\mathbf{66.07 \pm 1.11}$	$\mathbf{66.10 \pm 3.18}$
GRU	Yes	100	-	20	30	$\mathbf{58.30 \pm 2.12}$	$\mathbf{65.97 \pm 2.02}$
GRU	Yes	100	-	20	15	51.40 ± 0.94	53.80 ± 1.08
GRU	Yes	100	-	20	45	66.07 ± 1.11	66.10 ± 3.18
GRU	Yes	100	r, θ	20	45	68.70 ± 1.20	67.70 ± 0.86

Table 1: The configurations vary across cell type, whether they are multibranch or not, the number of epochs they have been trained, whether any additional features were included, the sequence resolution and length. The last two columns denote the average maximum validation accuracy (mean $\pm$ standard deviation) obtained during the training process of three different initialisations. In the case of non-multibranch models, the accuracy for mass and force questions are obtained by separate models. In bold, the model(s) per section that are significantly better than the rest.