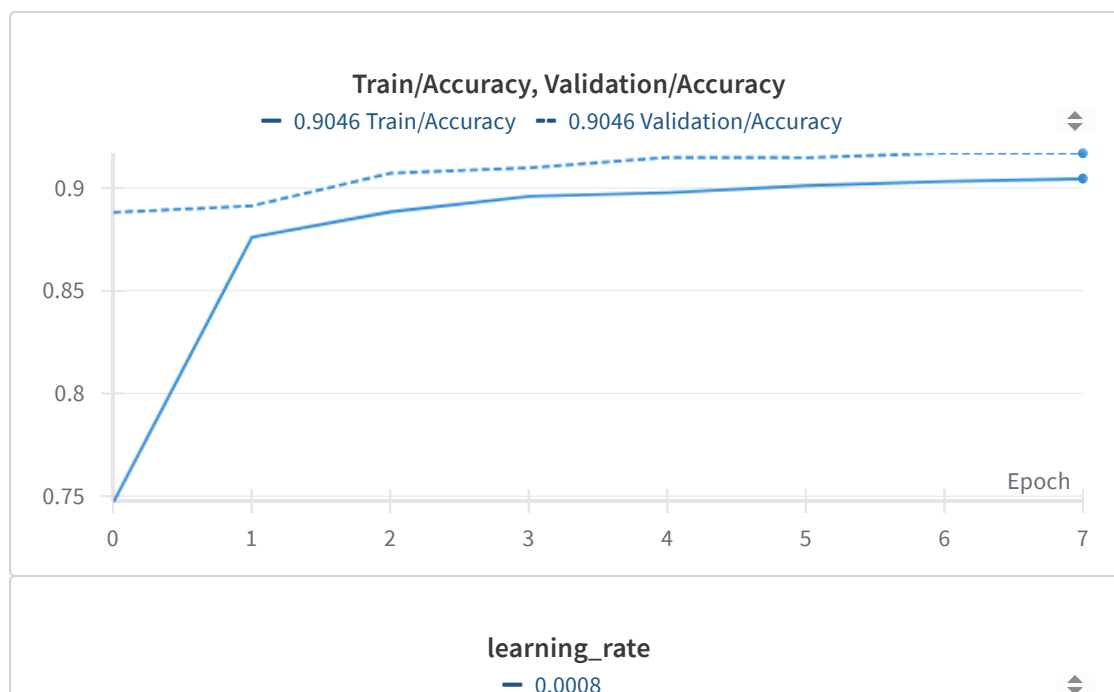


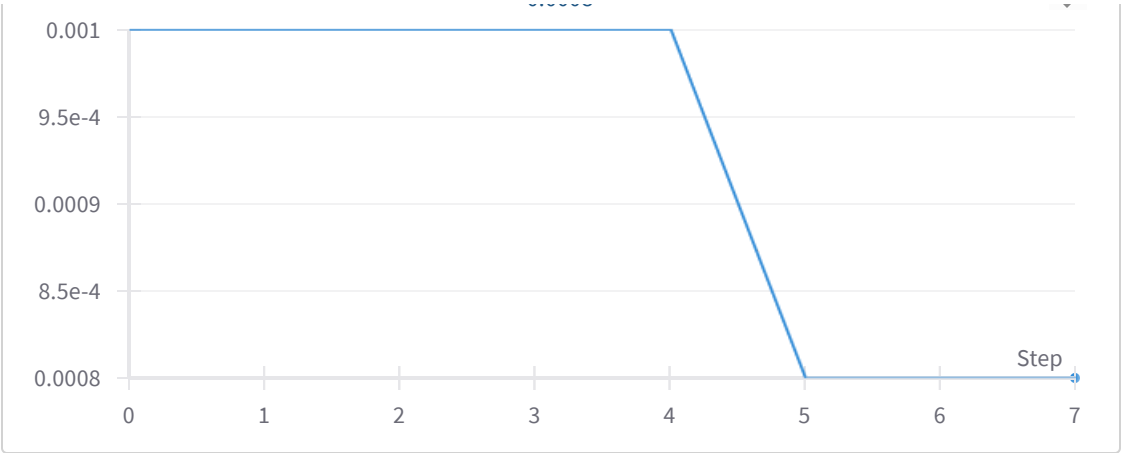
Dynamic Graph Convolutional Neural Network on ShapeNet's Airplane Class

DGCNN (Dynamic Graph Convolutional Neural Network) operates on ShapeNet's 3D Airplane class model using graph convolutions, extracting relationships among points. By discerning local and global features, it excels in 3D shape classification, segmentation, and retrieval tasks. Leveraging ShapeNet's diverse dataset, DGCNN demonstrates robust performance in understanding and processing complex 3D structures, establishing itself as a formidable model for tasks involving 3D object analysis and recognition.

Mirsha Morningstar

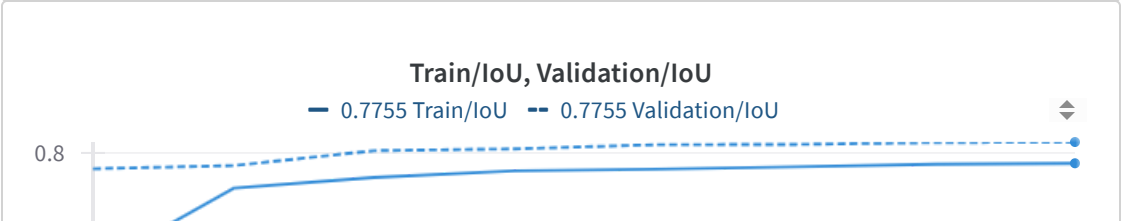
▼ Performance Metrics

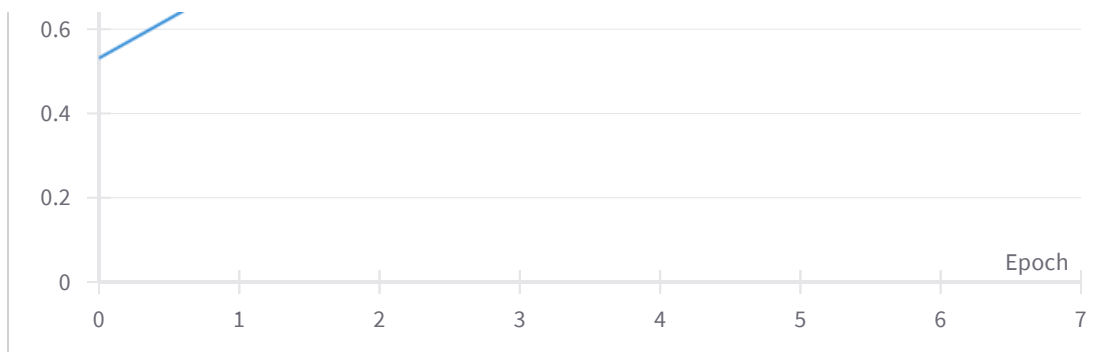





train-dgcnn

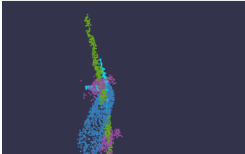
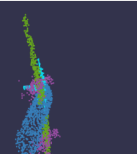
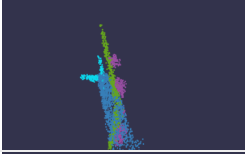
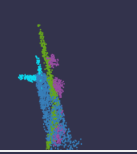
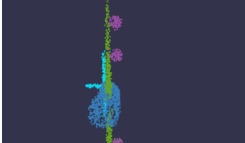
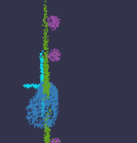
✖ META	
runtime	1h 52m 46s
➤ CONFIG (19 collapsed)	
✖ SUMMARY	
Evaluation	table-file
✖ Train	
Accuracy	0.9046
IoU	0.7755
Loss	0.2611
✖ Validation	
Accuracy	0.917
IoU	0.826
Loss	0.2099
_runtime	4570.425
_step	8
_timestamp	1704177598.313
➤ _wandb (1 collapsed)	
learning_rate	0.0008














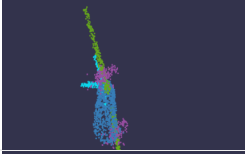
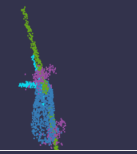
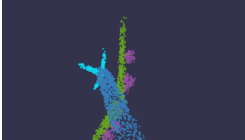
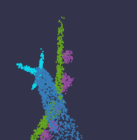
▼ Visualisation

`runs.summary["Evaluation"]` 

	Epoch	Ground-Truth	Prediction	Accuracy	IoU
10	1			0.8971	0.7809
	2			0.8992	0.7989
12	2			0.8673	0.7344

      10 - 12 of 80   [Export as CSV](#) [Columns...](#) [Reset](#)

`runs.summary["Evaluation"]` 

	Epoch	Ground-Truth	Prediction	Accuracy	IoU
20	2			0.8882	0.7719
21	3			0.9303	0.865

22

3

0.8951

0.7862

20

- 22 of 80

Export as CSV

Columns...

Reset

runs.summary["Evaluation"]

	Epoch	Ground-Truth	Prediction	Accuracy	IoU
30	3			0.9037	0.7943
31	4			0.9279	0.8586
32	4			0.8922	0.7813

30

- 32 of 80

Export as CSV

Columns...

Reset

runs.summary["Evaluation"]

	Epoch	Ground-Truth	Prediction	Accuracy	IoU
40	4			0.9094	0.8095
41	5			0.9326	0.8707
42	5			0.9096	0.8078

40

- 42 of 80




Export as CSV

Columns...

Reset

runs.summary["Evaluation"]

	Epoch	Ground-Truth	Prediction	Accuracy	IoU
	5			0.8959	0.7795

50				
51	6		0.9207	0.8426
52	6		0.9022	0.7935

≡ ≡ = - < < 50 - 52 of 80 > > Export as CSV Columns... Reset

runs.summary["Evaluation"]

☰	Epoch	Ground-Truth	Prediction	Accuracy	IoU
55	6			0.9748	0.9293
56	6			0.9092	0.621
57	6			0.907	0.7886

☰ ☰ = - < <

55

- 57 of 80 > >

Export as CSV Columns... Reset


runs.summary["Evaluation"]

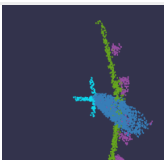
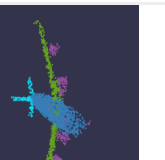
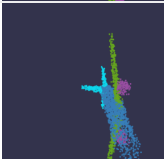
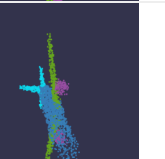
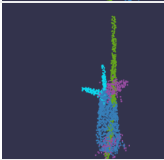
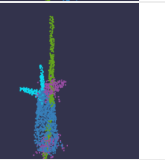
☰	Epoch	Ground-Truth	Prediction	Accuracy	IoU
65	7			0.972	0.9122
	7			0.9028	0.6006
66	7			0.9059	0.7915
	7				








☰ ☰ = - < <

65 - 67 of 80 > >

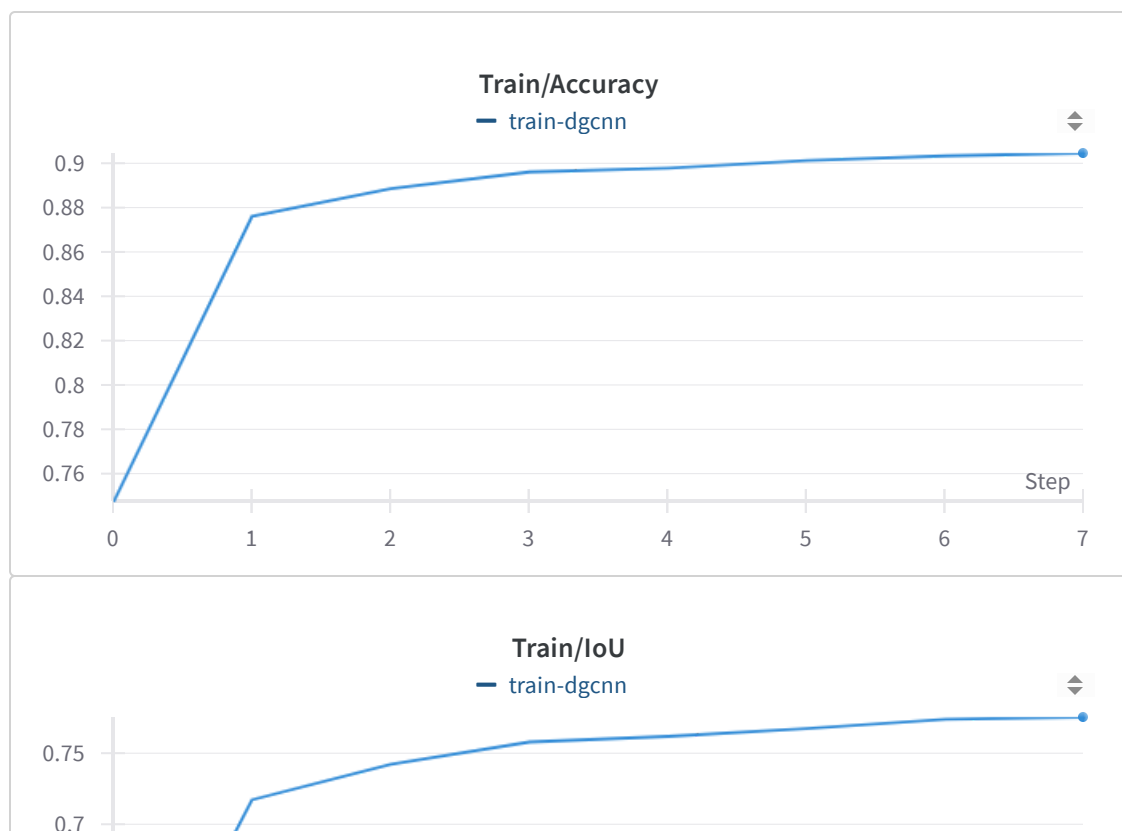
Export as CSV Columns... Reset

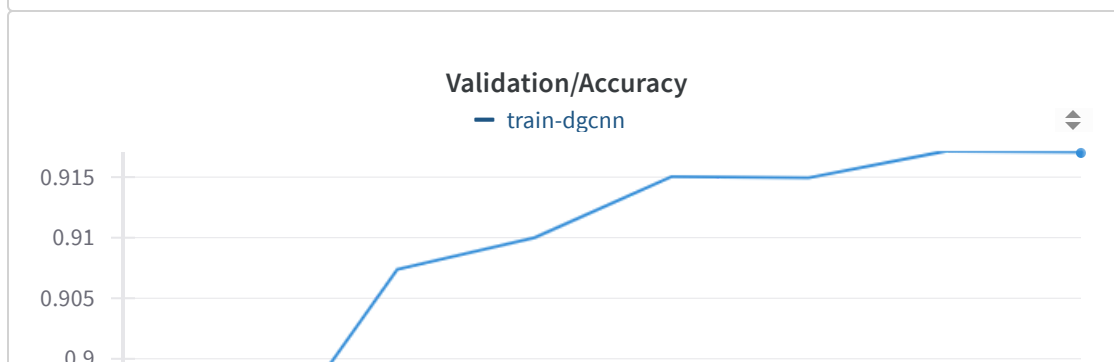
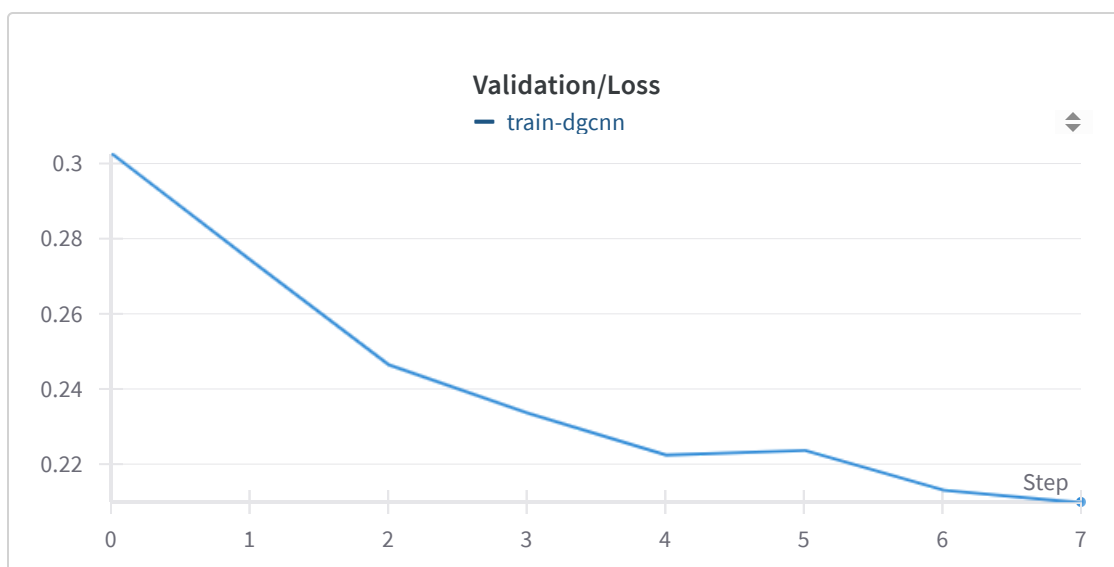
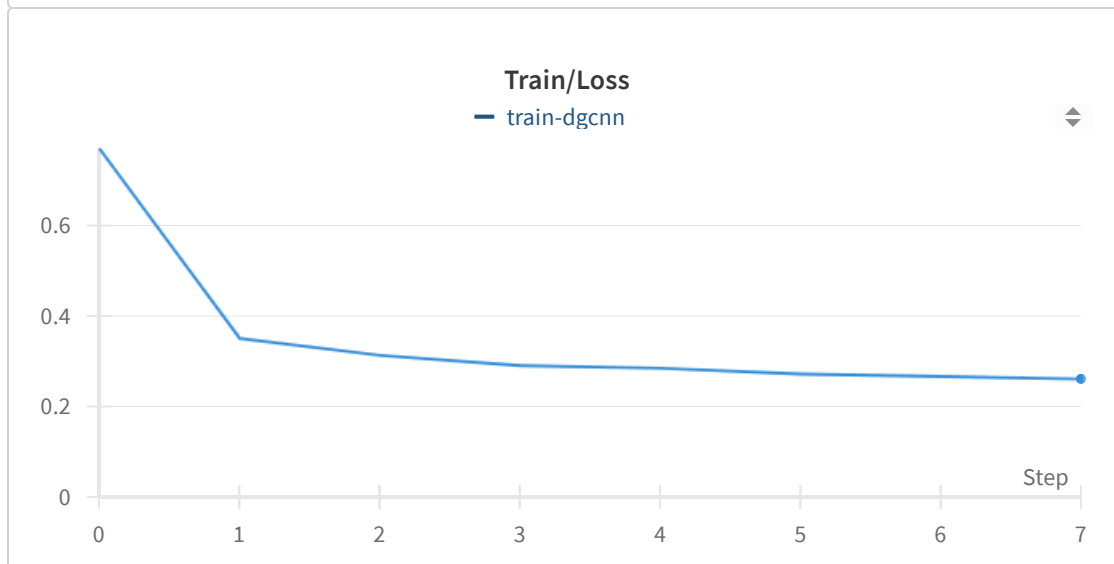
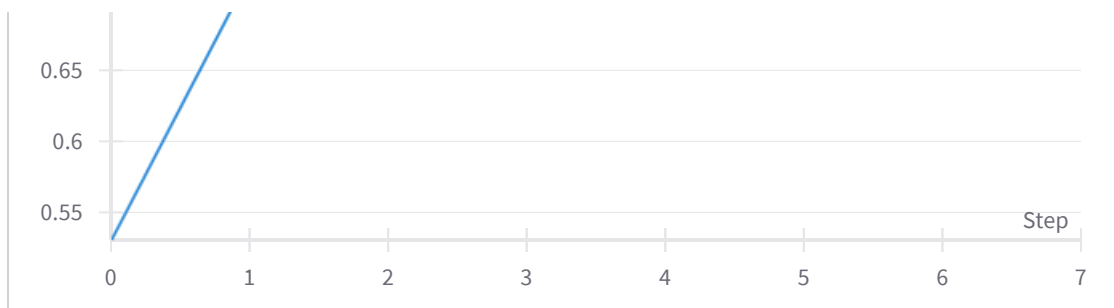
`runs.summary["Evaluation"]` 

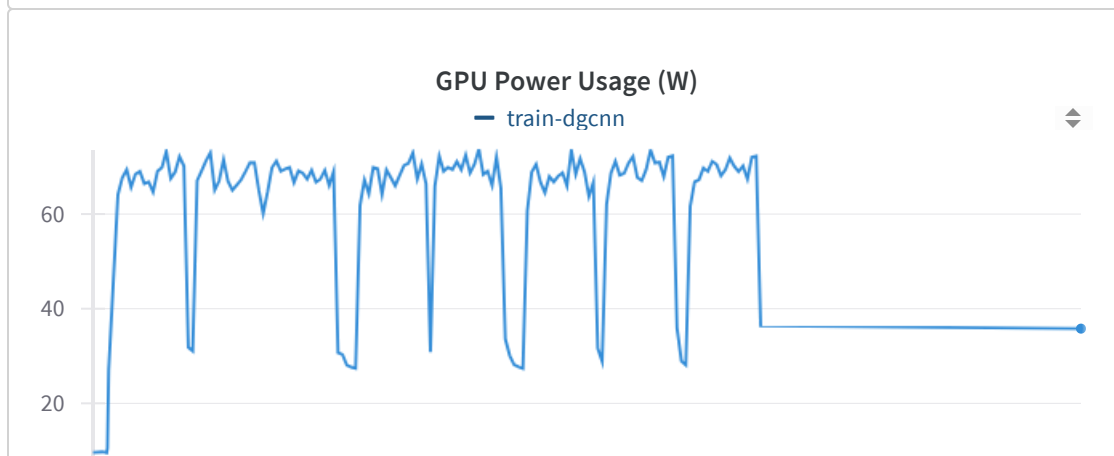
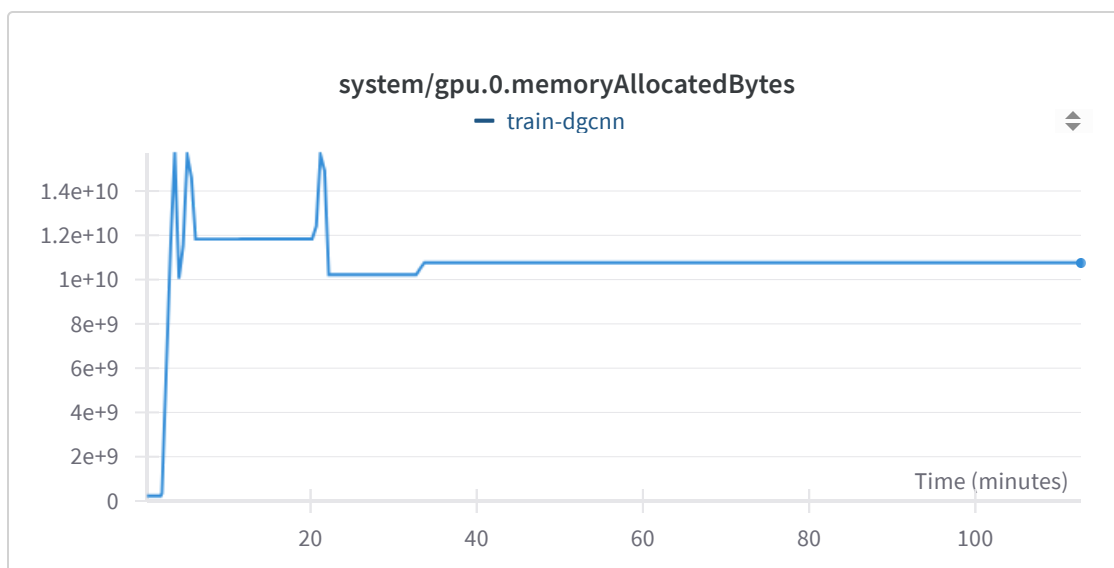
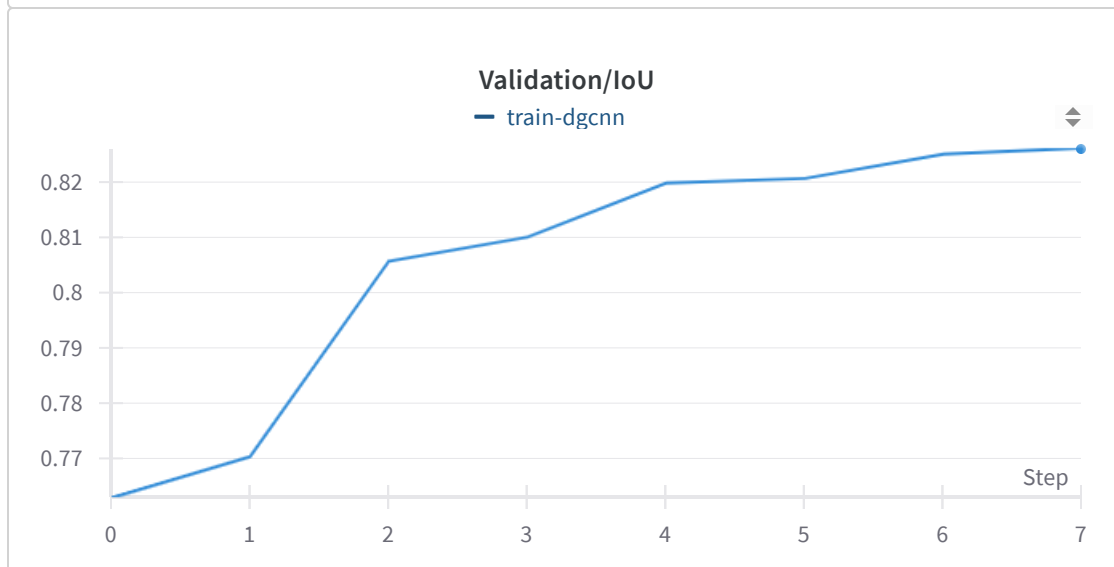
	Epoch	Ground-Truth	Prediction	Accuracy	IoU
78	8			0.9143	0.7995
79	8			0.9391	0.8679
80	8			0.9155	0.8232

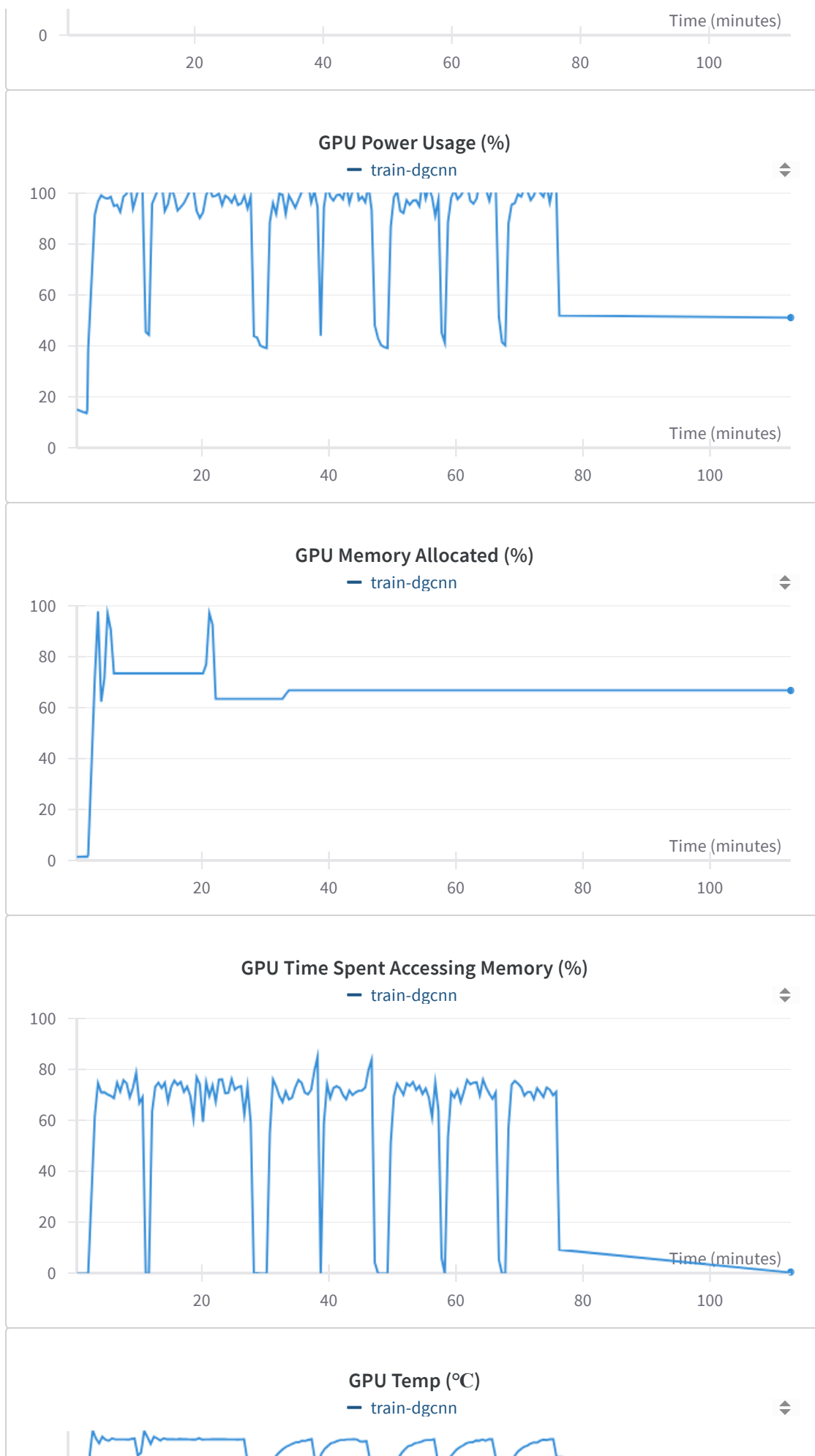







78 - 80 of 80 > >>
 [Export as CSV](#)
[Columns...](#)
[Reset](#)

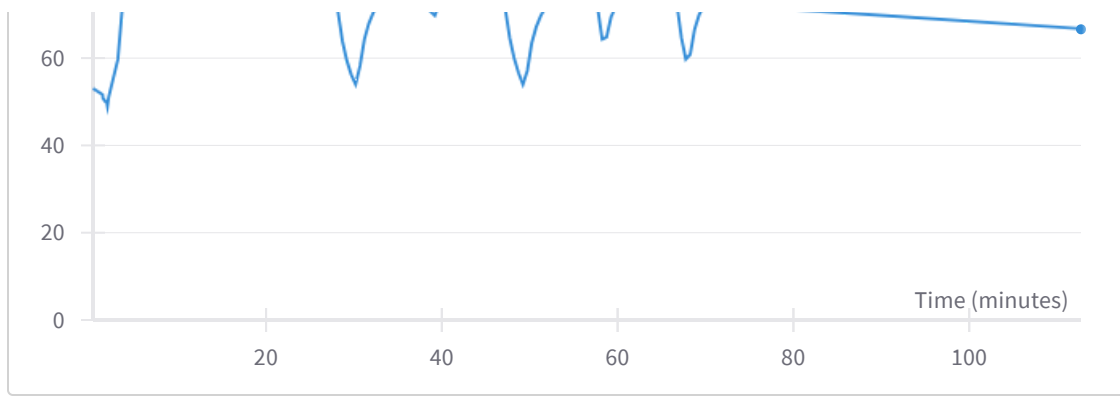
▼ Deeper Insights











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<https://wandb.ai/team-dubakur/pyg-point-cloud/reports/Dynamic-Graph-Convolutional-Neural-Network-on-ShapeNet-s-Airplane-Class--Vmlldzo2MzkzODgx>