tide test51

Lucy Score = Throughput x Availability x Acc / 10,000. LPD condenses live-fit vs Acc-champ RAM.
[T]=Tween [S]=Split [FP]=FastProxy [L]=Linear [HP]=HeadProxy
running - epoch 1 - lr 0.05 - 2026-09-12 01:08:57 - 0.0.0.0:8080
This epoch 54 / 110160 cells. Recorded 54 results. Learning rate 0.05.
Score 0 usually means the cell finished before a Lucy pulse (Acc never sampled). Score is live-fit: Throughput x Availability x Acc.
SGD that blocks serve dies on Availability. SoftAcc is serve-confidence only.
think-race host - tree sweep feeds Tide Lucy reports

Lucy champions (this tide)

Axis	Cell	Score	Soft	Acc	Thru	Avail
hard acc	chase|2x2x2|dense|float64|lr=2|cam=1|MeshTweenAlt	370.96	24.5	79.7	939.5	49.6
throughput	chase|1x1x1|dense|float64|lr=20|cam=1|MeshTweenAlt	60.65	0.0	5.0	1763.5	69.0
availability	chase|1x1x1|dense|float64|lr=10000|cam=1|MeshTweenAlt	0.00	0.0	2.5	1616.0	100.0
lucy score	chase|1x1x1|dense|float64|lr=2|cam=1|MeshTweenAlt	376.30	23.8	77.6	983.1	49.3
mobile score (trap)	chase|1x1x1|dense|float64|lr=2|cam=1|MeshTweenAlt	376.30	23.8	77.6	983.1	49.3
acc/sec	chase|2x2x2|dense|float64|lr=2|cam=1|MeshTweenAlt	370.96	24.5	79.7	939.5	49.6

Lucy axis champions (this tide)

Axis	Mode	DType	Arch	Value
hard_acc	Mesh[T]Alt	float64	singlex1	79.66
throughput	Mesh[T]Alt	float64	singlex1	1763.47
availability	Mesh[T]Alt	float64	singlex1	100.00
score	Mesh[T]Alt	float64	singlex1	376.30
soft_acc	Mesh[T]Alt	float64	singlex1	24.51
acc_thru	Mesh[T]Alt	float64	singlex1	763.13
realtime	Mesh[T]Alt	float64	singlex1	1216.66
keep_learn	Mesh[T]Alt	float64	singlex1	26.55
acc_per_sec	Mesh[T]Alt	float64	singlex1	26.55
consistency	Mesh[T]Alt	float64	singlex1	100.00
stability	Mesh[T]Alt	float64	singlex1	100.00
mobile_score	Mesh[T]Alt	float64	singlex1	7823.94
lpd	Mesh[T]Alt	float64	singlex1	0.99
mspeed	Mesh[T]Alt	float64	singlex1	1.00
mavail	Mesh[T]Alt	float64	singlex1	1.00
mix	Mesh[T]Alt	float64	singlex1	0.99
gold_std	Mesh[T]Alt	float64	singlex1	49.25

Best settings per train mode

Mode	DType	Format	Score	Soft	Acc	Avail	n
Mesh[T]Alt	float64	none	376.3	23.8	77.6	49.3	54

Best dtype per mode

Mode	Winner dtype	Score	Soft	Acc
Mesh[T]Alt	float64	376.3	23.8	77.6

Best mode per dtype

DType	Winner mode	Score	Soft	Acc
float64	Mesh[T]Alt	376.3	23.8	77.6

Leaderboard (Lucy Score)

#	Cell	Score	Soft	Acc	Thru	Avail

#	Cell	Score	Soft	Acc	Thru	Avail
1	chase|1x1x1|dense|float64|lr=2|cam=1|MeshTweenAlt	376.3	23.8	77.6	983.1	49.3
2	chase|3x3x3|dense|float64|lr=2|cam=1|MeshTweenAlt	373.4	23.9	76.4	984.8	49.6
3	chase|2x2x2|dense|float64|lr=2|cam=1|MeshTweenAlt	371.0	24.5	79.7	939.5	49.6
4	chase|3x3x3|dense|float64|lr=0.2|cam=1|MeshTweenAlt	270.3	18.2	58.0	983.9	47.4
5	chase|2x2x2|dense|float64|lr=0.2|cam=1|MeshTweenAlt	256.9	17.3	54.4	1003.2	47.1
6	chase|1x1x1|dense|float64|lr=0.2|cam=1|MeshTweenAlt	244.7	17.5	53.8	979.0	46.5
7	chase|1x1x1|dense|float64|lr=0.2|cam=2|MeshTweenAlt	227.7	18.5	59.9	810.8	46.9
8	chase|3x3x3|dense|float64|lr=0.2|cam=2|MeshTweenAlt	226.1	18.6	60.0	795.8	47.3
9	chase|2x2x2|dense|float64|lr=0.2|cam=2|MeshTweenAlt	201.0	17.4	55.0	784.8	46.6
10	chase|2x2x2|dense|float64|lr=0.2|cam=3|MeshTweenAlt	168.7	18.4	59.7	623.8	45.3
11	chase|3x3x3|dense|float64|lr=0.2|cam=3|MeshTweenAlt	166.9	17.9	58.0	637.6	45.1
12	chase|1x1x1|dense|float64|lr=0.2|cam=3|MeshTweenAlt	165.8	18.2	59.5	621.1	44.8
13	chase|2x2x2|dense|float64|lr=0.02|cam=1|MeshTweenAlt	155.3	14.1	32.4	1049.8	45.6
14	chase|3x3x3|dense|float64|lr=0.02|cam=1|MeshTweenAlt	146.1	14.3	29.8	1070.3	45.7
15	chase|1x1x1|dense|float64|lr=0.02|cam=1|MeshTweenAlt	145.6	14.4	32.0	997.8	45.6
16	chase|1x1x1|dense|float64|lr=0.02|cam=2|MeshTweenAlt	132.9	14.5	36.1	844.2	43.6
17	chase|2x2x2|dense|float64|lr=0.02|cam=2|MeshTweenAlt	129.1	14.7	35.8	814.8	44.2
18	chase|2x2x2|dense|float64|lr=0.02|cam=3|MeshTweenAlt	110.2	14.7	38.5	660.0	43.4
19	chase|3x3x3|dense|float64|lr=0.02|cam=2|MeshTweenAlt	109.4	14.5	36.0	687.4	44.2
20	chase|3x3x3|dense|float64|lr=0.02|cam=3|MeshTweenAlt	103.4	14.6	37.5	636.3	43.4

Leaderboard (SoftAcc)

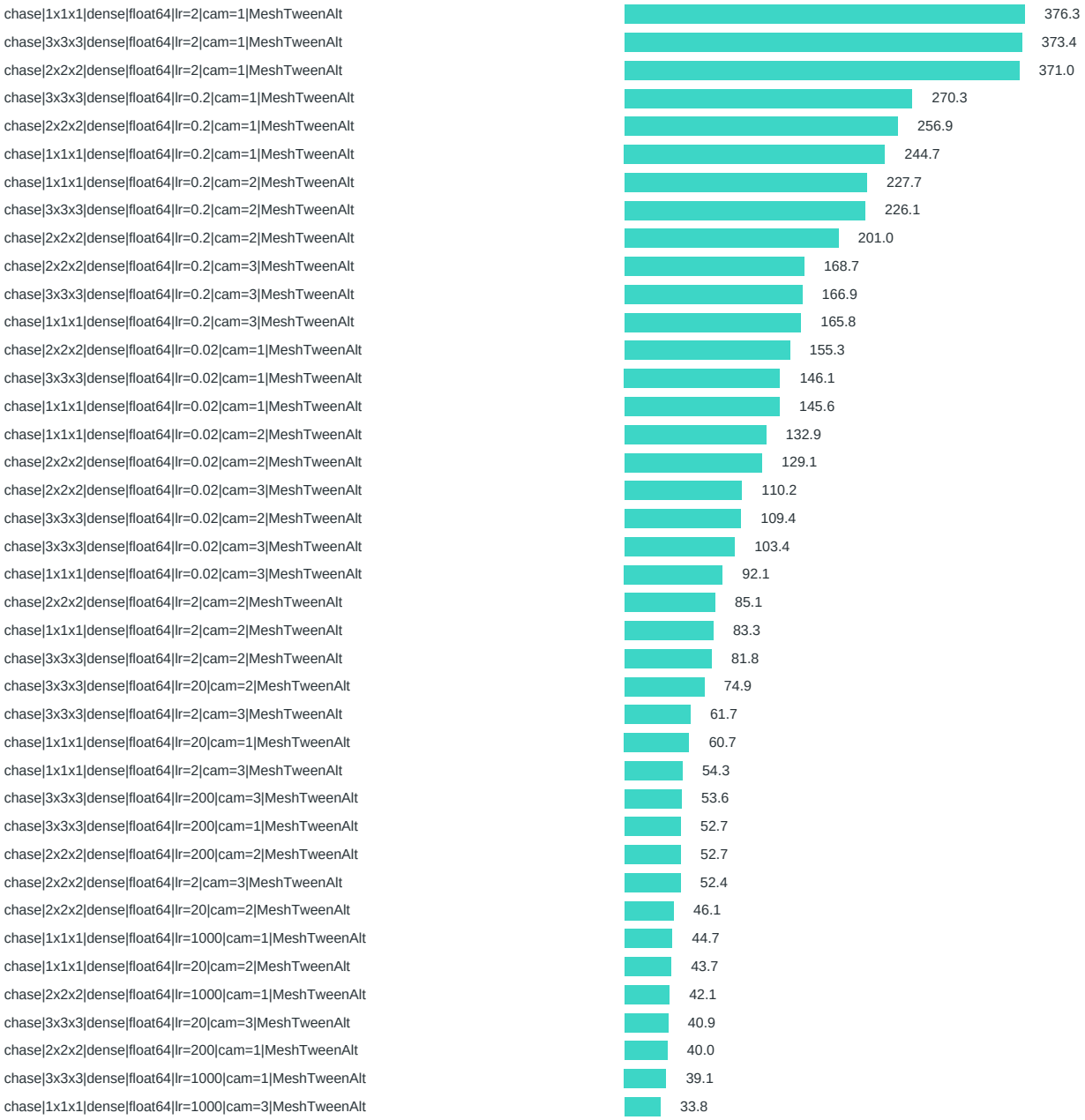
#	Cell	Score	Soft	Acc	Thru	Avail
1	chase|2x2x2|dense|float64|lr=2|cam=1|MeshTweenAlt	371.0	24.5	79.7	939.5	49.6
2	chase|3x3x3|dense|float64|lr=2|cam=1|MeshTweenAlt	373.4	23.9	76.4	984.8	49.6
3	chase|1x1x1|dense|float64|lr=2|cam=1|MeshTweenAlt	376.3	23.8	77.6	983.1	49.3
4	chase|3x3x3|dense|float64|lr=0.2|cam=2|MeshTweenAlt	226.1	18.6	60.0	795.8	47.3
5	chase|1x1x1|dense|float64|lr=0.2|cam=2|MeshTweenAlt	227.7	18.5	59.9	810.8	46.9
6	chase|2x2x2|dense|float64|lr=0.2|cam=3|MeshTweenAlt	168.7	18.4	59.7	623.8	45.3
7	chase|1x1x1|dense|float64|lr=0.2|cam=3|MeshTweenAlt	165.8	18.2	59.5	621.1	44.8
8	chase|3x3x3|dense|float64|lr=0.2|cam=1|MeshTweenAlt	270.3	18.2	58.0	983.9	47.4
9	chase|3x3x3|dense|float64|lr=0.2|cam=3|MeshTweenAlt	166.9	17.9	58.0	637.6	45.1
10	chase|1x1x1|dense|float64|lr=0.2|cam=1|MeshTweenAlt	244.7	17.5	53.8	979.0	46.5
11	chase|2x2x2|dense|float64|lr=0.2|cam=2|MeshTweenAlt	201.0	17.4	55.0	784.8	46.6
12	chase|2x2x2|dense|float64|lr=0.2|cam=1|MeshTweenAlt	256.9	17.3	54.4	1003.2	47.1
13	chase|1x1x1|dense|float64|lr=0.02|cam=3|MeshTweenAlt	92.1	14.8	36.6	607.6	41.4
14	chase|2x2x2|dense|float64|lr=0.02|cam=3|MeshTweenAlt	110.2	14.7	38.5	660.0	43.4
15	chase|2x2x2|dense|float64|lr=0.02|cam=2|MeshTweenAlt	129.1	14.7	35.8	814.8	44.2
16	chase|3x3x3|dense|float64|lr=0.02|cam=3|MeshTweenAlt	103.4	14.6	37.5	636.3	43.4
17	chase|3x3x3|dense|float64|lr=0.02|cam=2|MeshTweenAlt	109.4	14.5	36.0	687.4	44.2
18	chase|1x1x1|dense|float64|lr=0.02|cam=2|MeshTweenAlt	132.9	14.5	36.1	844.2	43.6
19	chase|1x1x1|dense|float64|lr=0.02|cam=1|MeshTweenAlt	145.6	14.4	32.0	997.8	45.6
20	chase|3x3x3|dense|float64|lr=0.02|cam=1|MeshTweenAlt	146.1	14.3	29.8	1070.3	45.7

Leaderboard (hard Acc)

#	Cell	Score	Soft	Acc	Thru	Avail
1	chase|2x2x2|dense|float64|lr=2|cam=1|MeshTweenAlt	371.0	24.5	79.7	939.5	49.6
2	chase|1x1x1|dense|float64|lr=2|cam=1|MeshTweenAlt	376.3	23.8	77.6	983.1	49.3
3	chase|3x3x3|dense|float64|lr=2|cam=1|MeshTweenAlt	373.4	23.9	76.4	984.8	49.6
4	chase|3x3x3|dense|float64|lr=0.2|cam=2|MeshTweenAlt	226.1	18.6	60.0	795.8	47.3
5	chase|1x1x1|dense|float64|lr=0.2|cam=2|MeshTweenAlt	227.7	18.5	59.9	810.8	46.9

6	chase|2x2x2|dense|float64|lr=0.2|cam=3|MeshTweenAlt	168.7	18.4	59.7	623.8	45.3
7	chase|1x1x1|dense|float64|lr=0.2|cam=3|MeshTweenAlt	165.8	18.2	59.5	621.1	44.8
8	chase|3x3x3|dense|float64|lr=0.2|cam=1|MeshTweenAlt	270.3	18.2	58.0	983.9	47.4
9	chase|3x3x3|dense|float64|lr=0.2|cam=3|MeshTweenAlt	166.9	17.9	58.0	637.6	45.1
10	chase|2x2x2|dense|float64|lr=0.2|cam=2|MeshTweenAlt	201.0	17.4	55.0	784.8	46.6
11	chase|2x2x2|dense|float64|lr=0.2|cam=1|MeshTweenAlt	256.9	17.3	54.4	1003.2	47.1
12	chase|1x1x1|dense|float64|lr=0.2|cam=1|MeshTweenAlt	244.7	17.5	53.8	979.0	46.5
13	chase|2x2x2|dense|float64|lr=0.02|cam=3|MeshTweenAlt	110.2	14.7	38.5	660.0	43.4
14	chase|3x3x3|dense|float64|lr=0.02|cam=3|MeshTweenAlt	103.4	14.6	37.5	636.3	43.4
15	chase|1x1x1|dense|float64|lr=0.02|cam=3|MeshTweenAlt	92.1	14.8	36.6	607.6	41.4
16	chase|1x1x1|dense|float64|lr=0.02|cam=2|MeshTweenAlt	132.9	14.5	36.1	844.2	43.6
17	chase|3x3x3|dense|float64|lr=0.02|cam=2|MeshTweenAlt	109.4	14.5	36.0	687.4	44.2
18	chase|2x2x2|dense|float64|lr=0.02|cam=2|MeshTweenAlt	129.1	14.7	35.8	814.8	44.2
19	chase|2x2x2|dense|float64|lr=0.02|cam=1|MeshTweenAlt	155.3	14.1	32.4	1049.8	45.6
20	chase|1x1x1|dense|float64|lr=0.02|cam=1|MeshTweenAlt	145.6	14.4	32.0	997.8	45.6

Top scores



Best settings per mode



Mean Score by train mode



Mean hard Acc by train mode



Mean SoftAcc by train mode



Mean Availability by train mode



Mean Throughput by train mode



Mean Score by dtype



Mean hard Acc by dtype



Mean Score by arch



Honesty - mean Score, every mode x dtype



Honesty - mean hard Acc, every mode x dtype



Honesty - mean SoftAcc, every mode x dtype

Honesty - mean SoftAcc, every mode x dtype



Honesty - mean Avail, every mode x dtype



Mean Score, every mode x arch



Mean hard Acc, every mode x arch



Mean Avail, every mode x arch

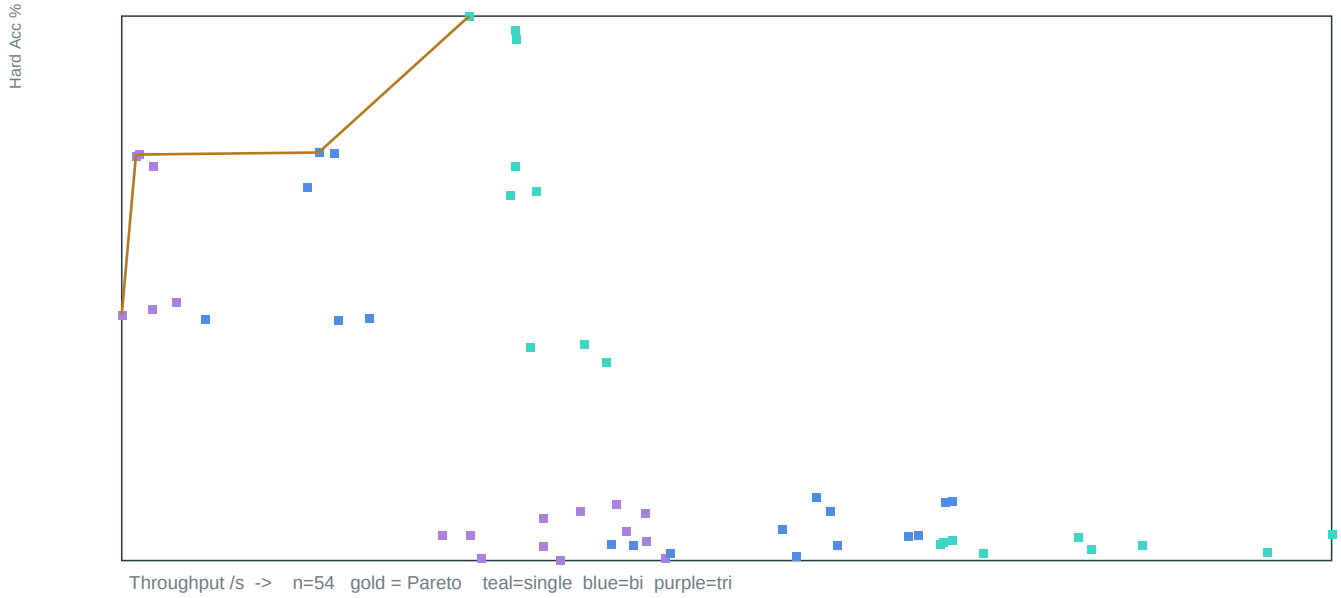


Pillars - Availability vs hard Acc

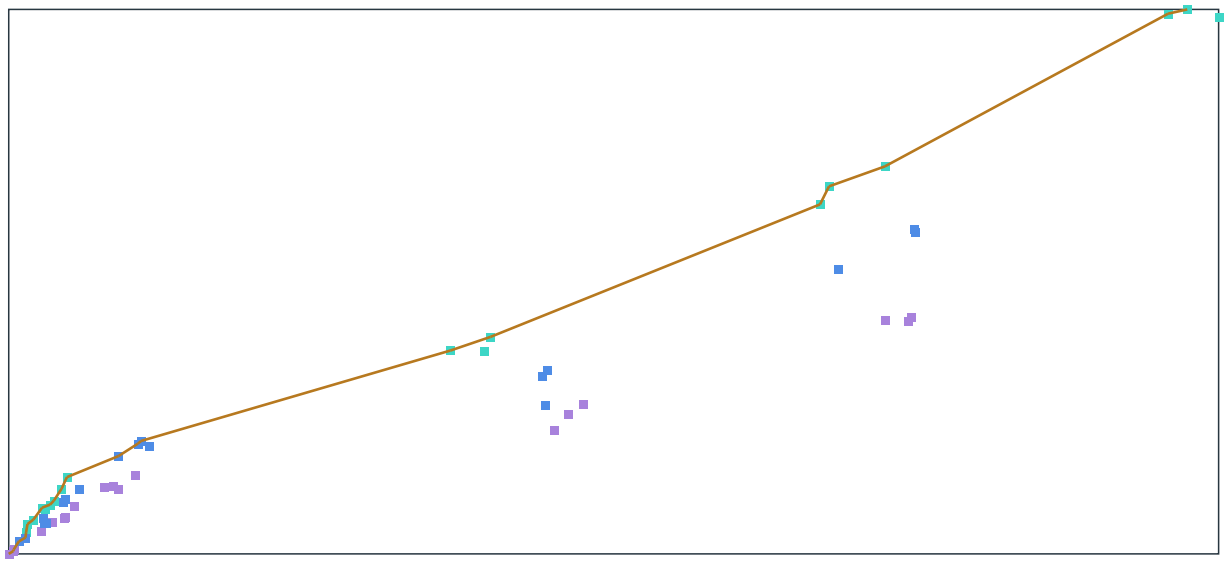
Pillars - Availability vs hard Acc



Pillars - Throughput vs hard Acc



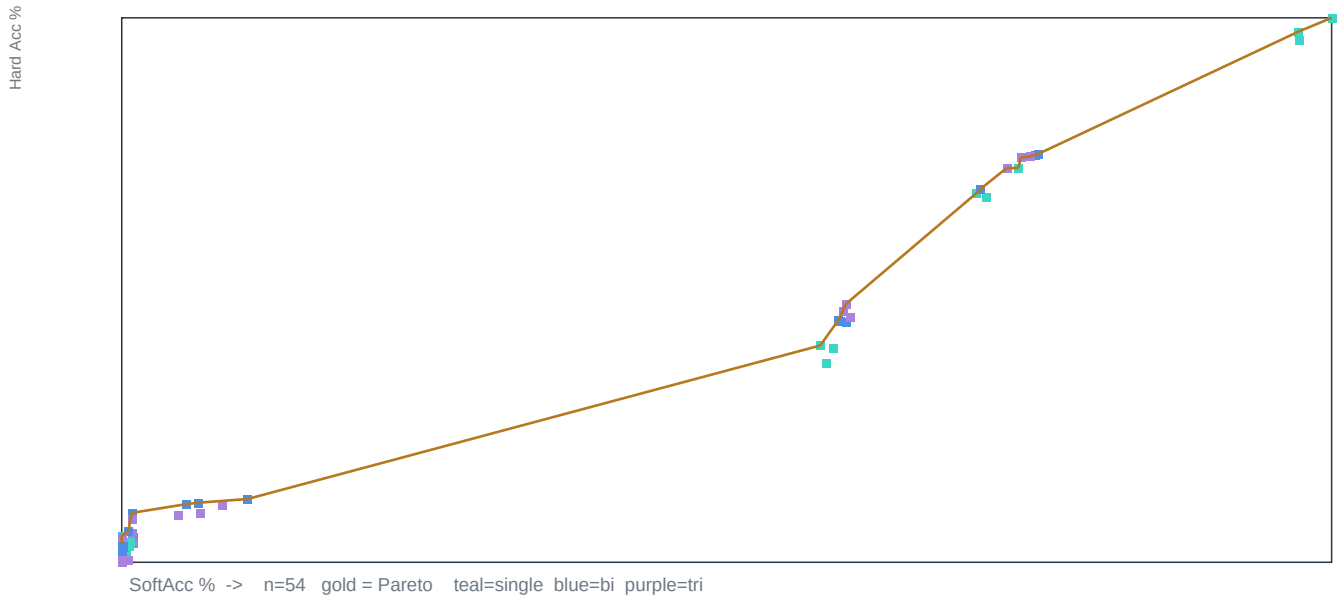
Pareto - hard Acc vs Lucy Score



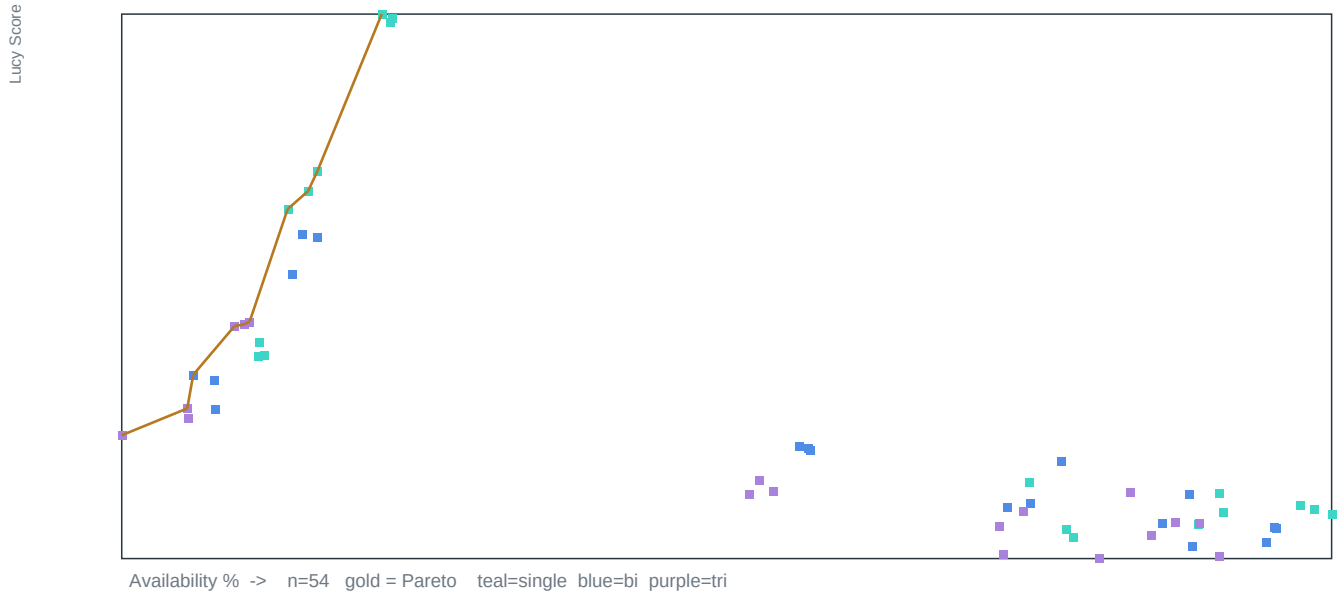
Hard Acc % -> n=54 gold = Pareto teal=single blue=bi purple=tri

Lucy Score (Velvet)

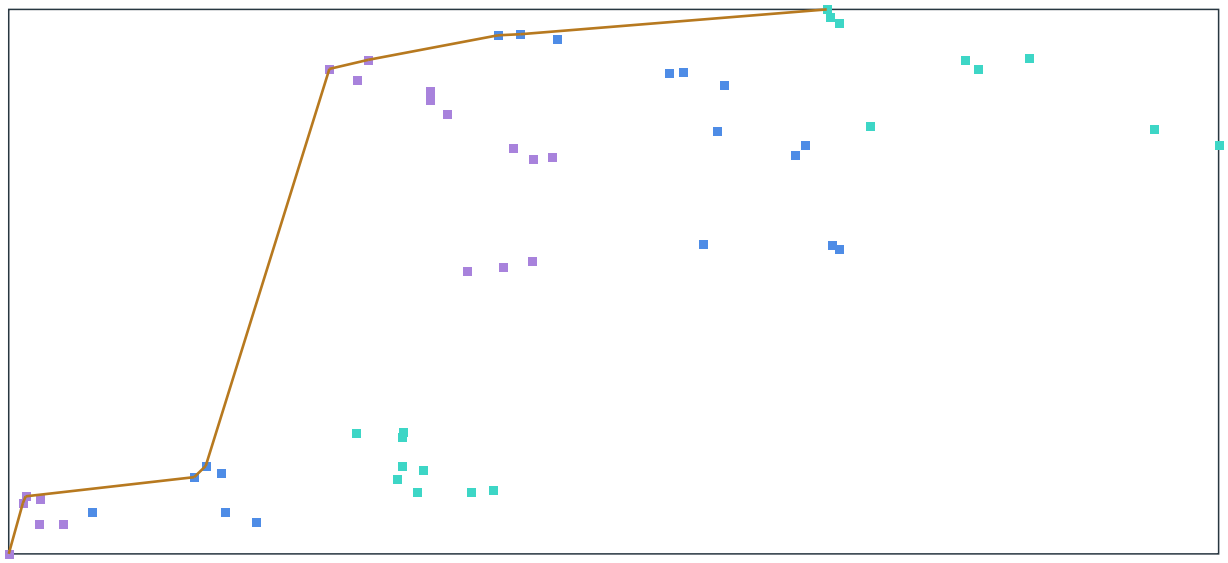
SoftAcc (serve-confidence) vs hard Acc



Avail vs Lucy Score (duty clock)



Pillars - Throughput vs Availability

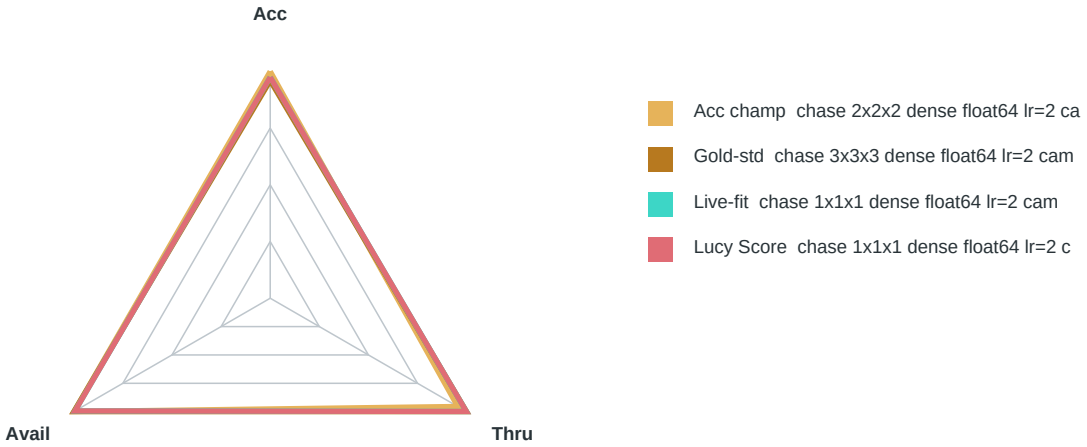



Throughput /s -> n=54 gold = Pareto teal=single blue=bi purple=tri
Availability %

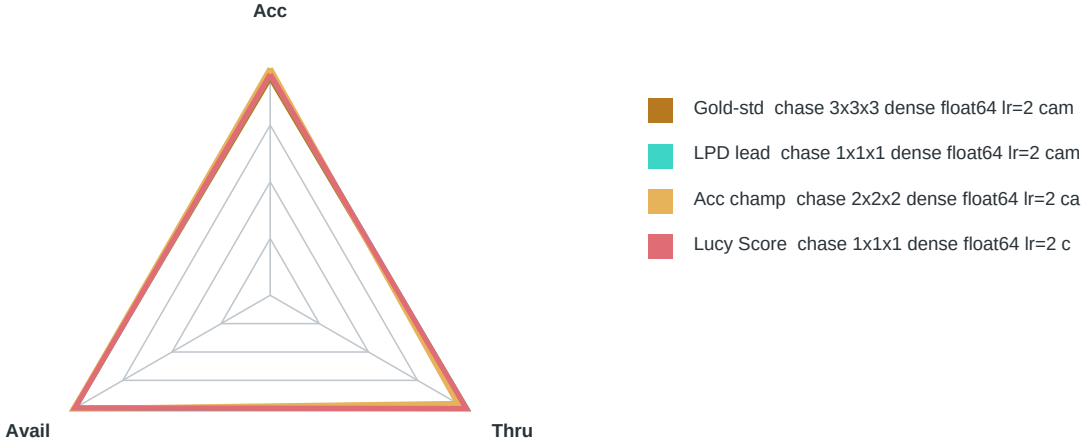
Consciousness - Acc, Throughput, Availability

Synthetic organism / Lucy density: can the net run and train at the same time in a small box. Lucy Score = Throughput x Availability x Acc / 10,000 (hard Acc; SoftAcc is serve-confidence only). SGD that blocks serve dies on Availability. Q = geomean Acc/Thru/Avail vs learner peaks (traps do not set Thru/Avail). LPD = Q x shrink vs Acc-champ RAM; 0 unless Acc keep >=70%. Gold = all 3 pillars >=80% at <=20% Acc-champ RAM. Gold-std = Acc >=80% plus Thru or Avail, then smallest then fastest. Score/MiB is the binary trap.
Acc champ chase|2x2x2|dense|float64|lr=2|cam=1|MeshTweenAlt Acc 79.7 Thru 940 Avail 49.6% 49.2 KiB (RAM reference)
Lucy Score champ (T x Avail x Acc) chase|1x1x1|dense|float64|lr=2|cam=1|MeshTweenAlt Score 376.3 Acc 77.6 Soft 24 49.2 KiB
Live-fit champ (best Q) chase|1x1x1|dense|float64|lr=2|cam=1|MeshTweenAlt Acc 77.6 Thru 983 Avail 49.3% 49.2 KiB
Gold-std (2+ pillars, Acc keep >= 80%, then smallest then fastest): chase|3x3x3|dense|float64|lr=2|cam=1|MeshTweenAlt mode Mesh[T]Alt Acc 76.4 Thru 985 49.2 KiB
Board fastest chase|1x1x1|dense|float64|lr=20|cam=1|MeshTweenAlt Thru 1763 (traps may own this) Best availability chase|3x3x3|dense|float64|lr=1000|cam=1|MeshTweenAlt 78.2%
Learner Thru peak 985 learner Avail peak 49.6%

Consciousness radar - Acc / Thru / Avail vs learner peaks



Memory density radar - same pillars x shrink vs Acc champ (traps sit at origin)



No gold cell yet. Need all three pillars at 80% of learner peaks in one fifth of Acc-champ RAM.

Gold-standard train modes - 2+ pillars, Acc keep >= 80%, smallest then fastest

Mode	n	Acc	KiB	Thru	Cell
Mesh[T]Alt	3	79.7	49.2	985	chase 3x3x3 dense float64 lr=2 cam=1 MeshTweenAlt

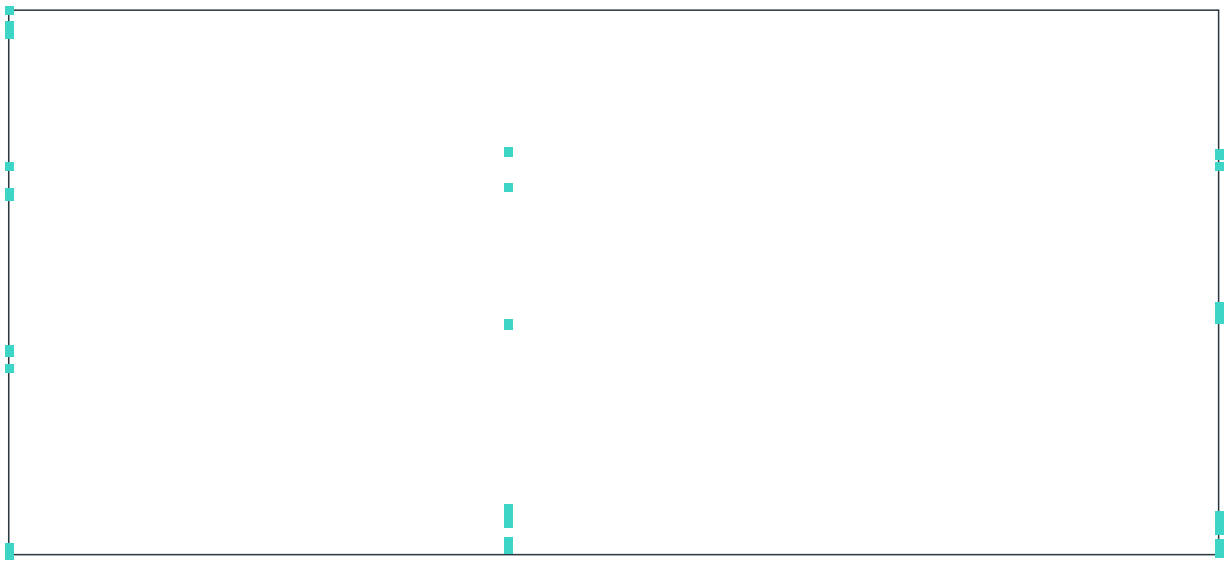
Lucy density (LPD) - Q x shrink vs Acc-champ RAM; 0 if Acc keep < 70%

Band	Cell	Acc%	Thru%	Avail%	Q%	RAM%	xSmall	LPD	Acc	Thru	KiB
keep	chase 1x1x1 dense float64 lr=2 cam=1 MeshTwee~	97	100	99	99	100	1.0	0.99	77.6	983	49.2
keep	chase 3x3x3 dense float64 lr=2 cam=1 MeshTwee~	96	100	100	99	100	1.0	0.99	76.4	985	49.2
keep	chase 2x2x2 dense float64 lr=2 cam=1 MeshTwee~	100	95	100	98	100	1.0	0.98	79.7	940	49.2
-	chase 3x3x3 dense float64 lr=0.2 cam=1 MeshTw~	73	100	95	89	100	1.0	0.89	58.0	984	49.2
-	chase 1x1x1 dense float64 lr=0.2 cam=2 MeshTw~	75	82	94	84	123	0.8	0.68	59.9	811	60.5
-	chase 3x3x3 dense float64 lr=0.2 cam=2 MeshTw~	75	81	95	83	123	0.8	0.68	60.0	796	60.5
-	chase 2x2x2 dense float64 lr=0.2 cam=3 MeshTw~	75	63	91	76	155	0.6	0.49	59.7	624	76.5
-	chase 3x3x3 dense float64 lr=0.2 cam=3 MeshTw~	73	65	91	75	155	0.6	0.49	58.0	638	76.5
-	chase 1x1x1 dense float64 lr=0.2 cam=3 MeshTw~	75	63	90	75	155	0.6	0.48	59.5	621	76.5
-	chase 2x2x2 dense float64 lr=0.2 cam=1 MeshTw~	68	100	95	87	100	1.0	0.00	54.4	1003	49.2
-	chase 1x1x1 dense float64 lr=0.2 cam=1 MeshTw~	68	99	94	86	100	1.0	0.00	53.8	979	49.2
-	chase 2x2x2 dense float64 lr=0.2 cam=2 MeshTw~	69	80	94	80	123	0.8	0.00	55.0	785	60.5
-	chase 2x2x2 dense float64 lr=0.02 cam=1 MeshT~	41	100	92	72	100	1.0	0.00	32.4	1050	49.2
-	chase 1x1x1 dense float64 lr=0.02 cam=1 MeshT~	40	100	92	72	100	1.0	0.00	32.0	998	49.2
-	chase 3x3x3 dense float64 lr=0.02 cam=1 MeshT~	37	100	92	70	100	1.0	0.00	29.8	1070	49.2
-	chase 1x1x1 dense float64 lr=0.02 cam=2 MeshT~	45	86	88	70	123	0.8	0.00	36.1	844	60.5
-	chase 2x2x2 dense float64 lr=0.02 cam=2 MeshT~	45	83	89	69	123	0.8	0.00	35.8	815	60.5
-	chase 2x2x2 dense float64 lr=0.02 cam=3 MeshT~	48	67	87	66	155	0.6	0.00	38.5	660	76.5
-	chase 3x3x3 dense float64 lr=0.02 cam=2 MeshT~	45	70	89	65	123	0.8	0.00	36.0	687	60.5
-	chase 3x3x3 dense float64 lr=0.02 cam=3 MeshT~	47	65	87	64	155	0.6	0.00	37.5	636	76.5

Consciousness rank - Q = geomean Acc/Thru/Avail keep

Band	Cell	Acc%	Thru%	Avail%	Q%	LPD	Thru	Avail
keep	chase 1x1x1 dense float64 lr=2 cam=1 MeshTweenAlt	97	100	99	99	0.99	983	49.3
keep	chase 3x3x3 dense float64 lr=2 cam=1 MeshTweenAlt	96	100	100	99	0.99	985	49.6
keep	chase 2x2x2 dense float64 lr=2 cam=1 MeshTweenAlt	100	95	100	98	0.98	940	49.6
-	chase 3x3x3 dense float64 lr=0.2 cam=1 MeshTweenAlt	73	100	95	89	0.89	984	47.4
-	chase 1x1x1 dense float64 lr=0.2 cam=2 MeshTweenAlt	75	82	94	84	0.68	811	46.9
-	chase 3x3x3 dense float64 lr=0.2 cam=2 MeshTweenAlt	75	81	95	83	0.68	796	47.3
-	chase 2x2x2 dense float64 lr=0.2 cam=3 MeshTweenAlt	75	63	91	76	0.49	624	45.3
-	chase 3x3x3 dense float64 lr=0.2 cam=3 MeshTweenAlt	73	65	91	75	0.49	638	45.1
-	chase 1x1x1 dense float64 lr=0.2 cam=3 MeshTweenAlt	75	63	90	75	0.48	621	44.8
-	chase 2x2x2 dense float64 lr=0.2 cam=1 MeshTweenAlt	68	100	95	87	0.00	1003	47.1

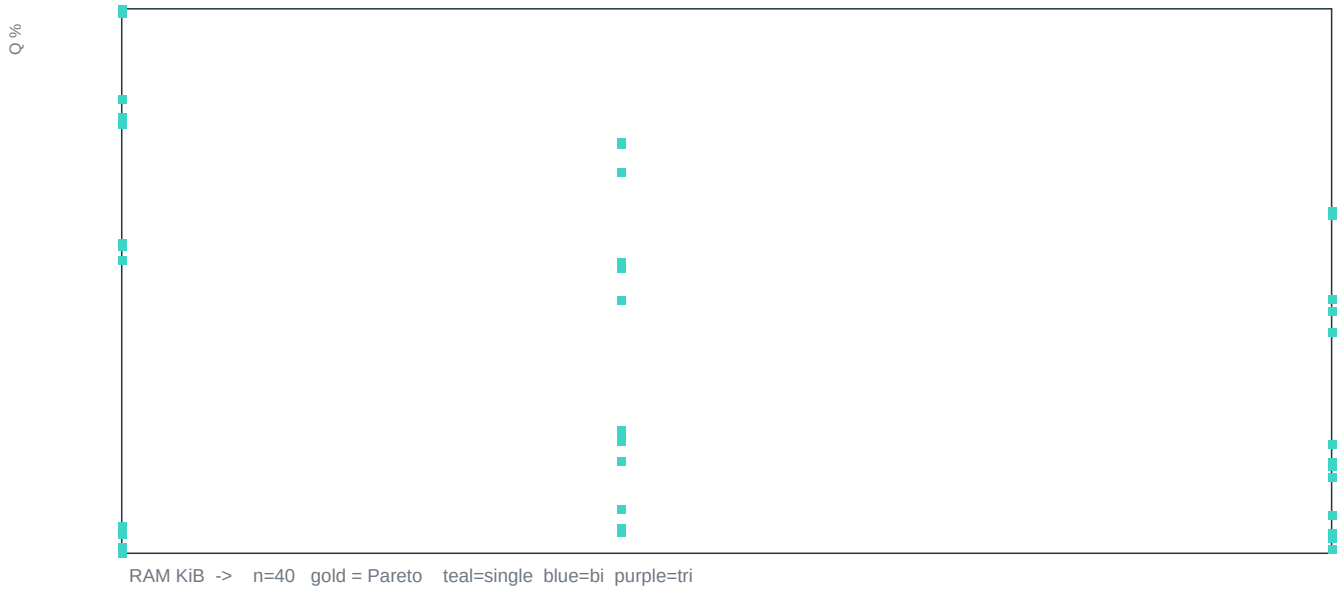
Acc keep % vs RAM KiB (gold = high Acc, low RAM vs Acc champ)



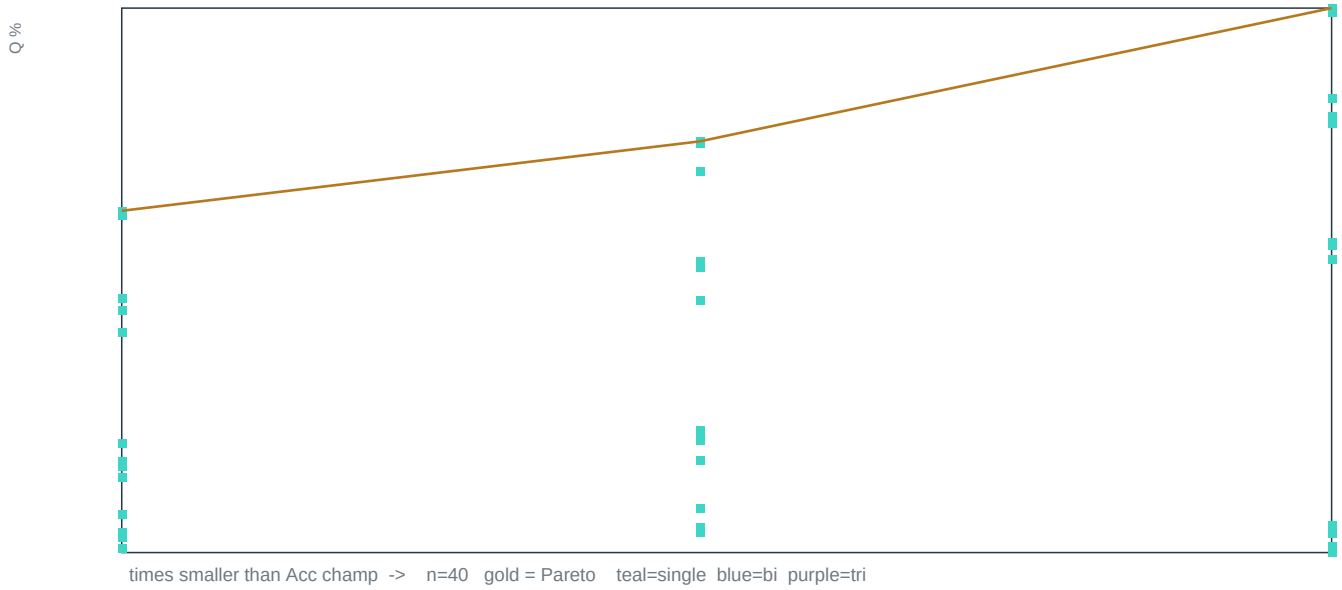
RAM KiB -> n=40 gold = Pareto teal=single blue=bi purple=tri

Acc keep % vs Acc champ

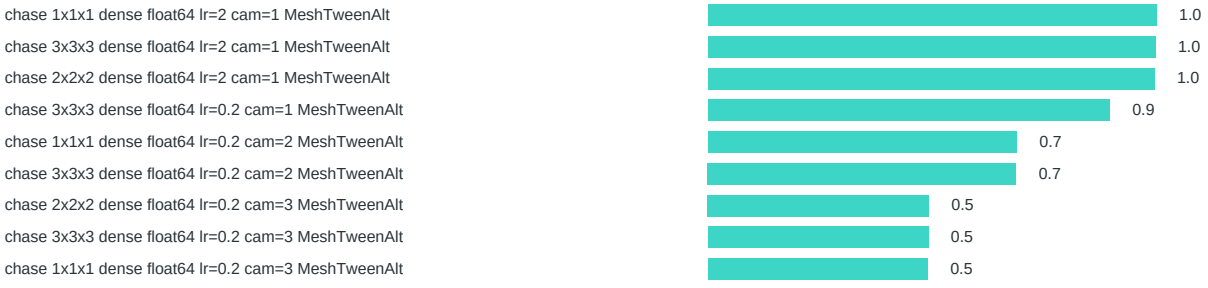
Q% vs RAM KiB (gold = high consciousness, low RAM)



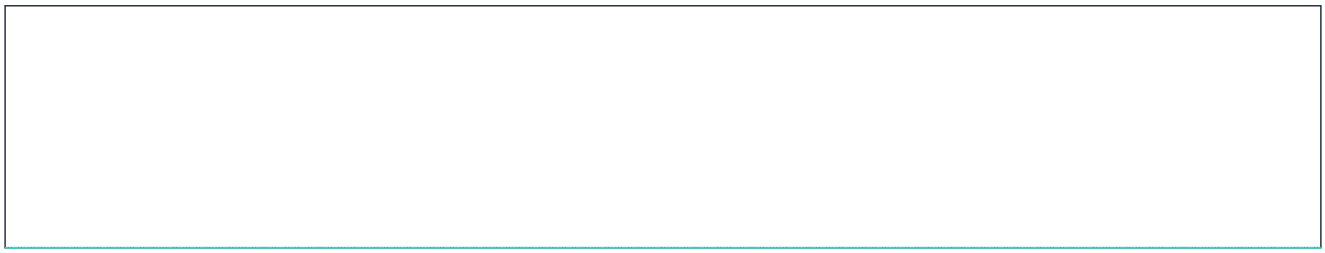
Q% vs shrink vs Acc champ (gold = upper right)



Top Lucy density (LPD)

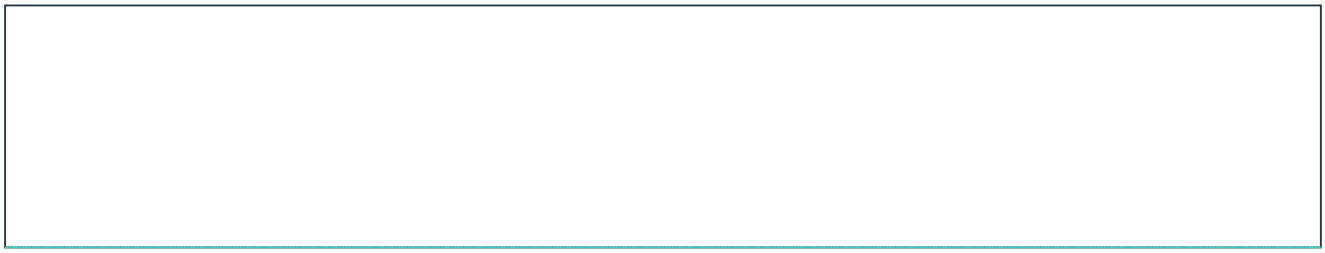


Live pulse (Score)



n=400 min=0.00 max=1.00

Live pulse (SoftAcc)



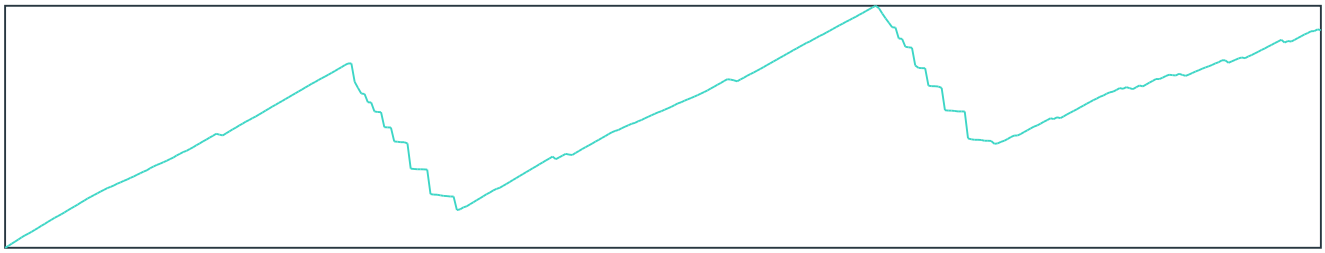
n=400 min=0.00 max=1.00

Live pulse (Availability)



n=400 min=100.00 max=101.00

Live pulse (Throughput)



n=400 min=1602.26 max=1617.52

Queue by train mode (this epoch)

Mode	Done	Run	Left	Total
Mesh[T]Alt	54	1	12185	12240
Mesh[T][S][FP]	0	0	12240	12240
Mesh[T][S]Sparse	0	0	12240	12240
Step[T][S][HP]	0	0	12240	12240
Step[T][S][L]	0	0	12240	12240
Step[T][S][FP]	0	0	12240	12240
Step[T][S][L]Cache	0	0	12240	12240
Step[T][S][HP]Async	0	0	12240	12240
Step[T][S]Sparse	0	0	12240	12240