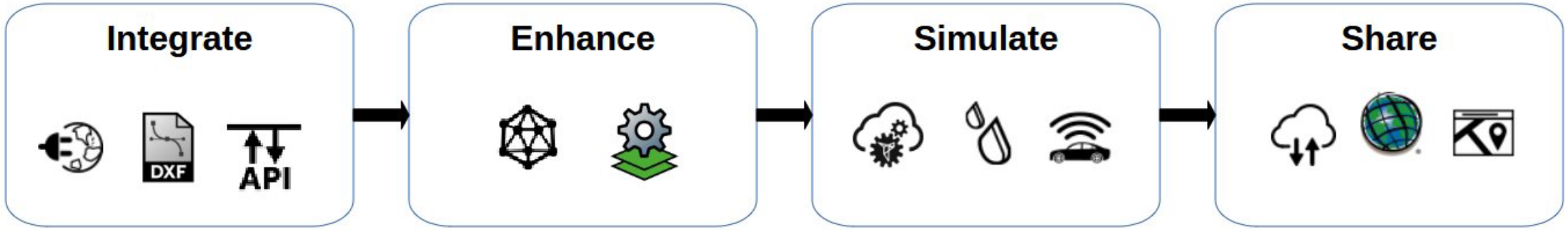
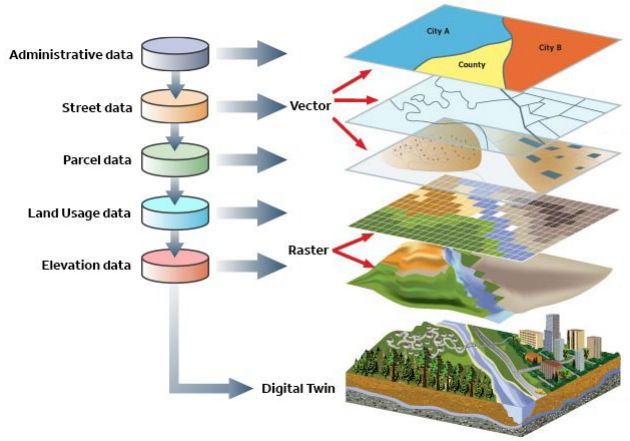
Even voorstellen

- **Ward van Laatum**

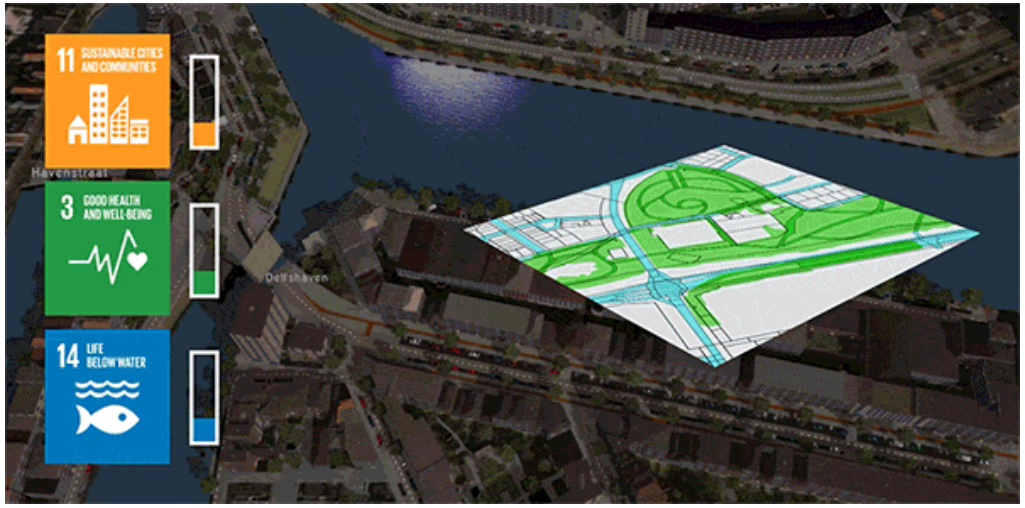
- t. +31 6 86872006
- e. Ward@Tygron.com

Verbeteren van je data met AI



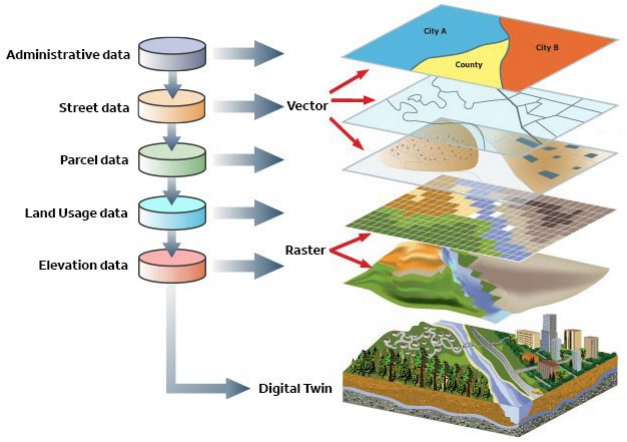


Integreren

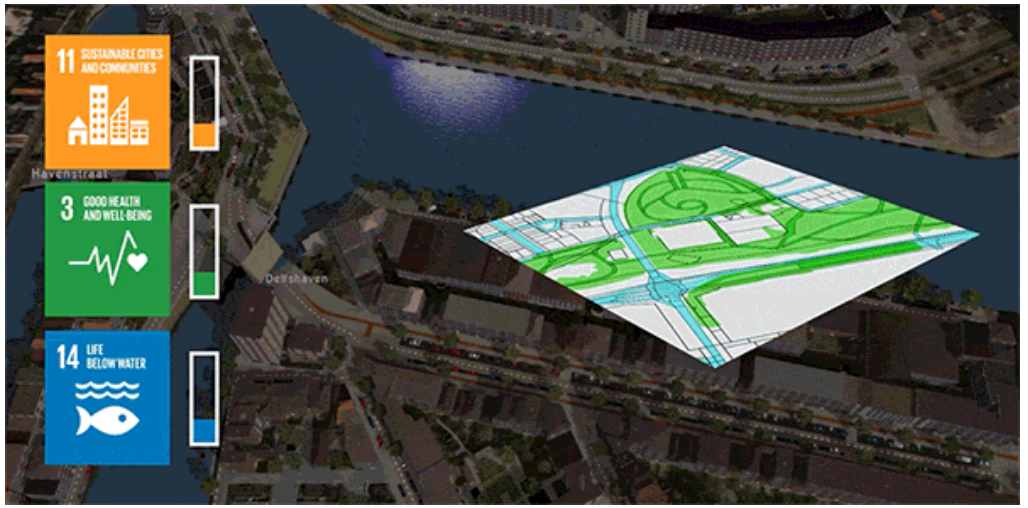


Simuleren

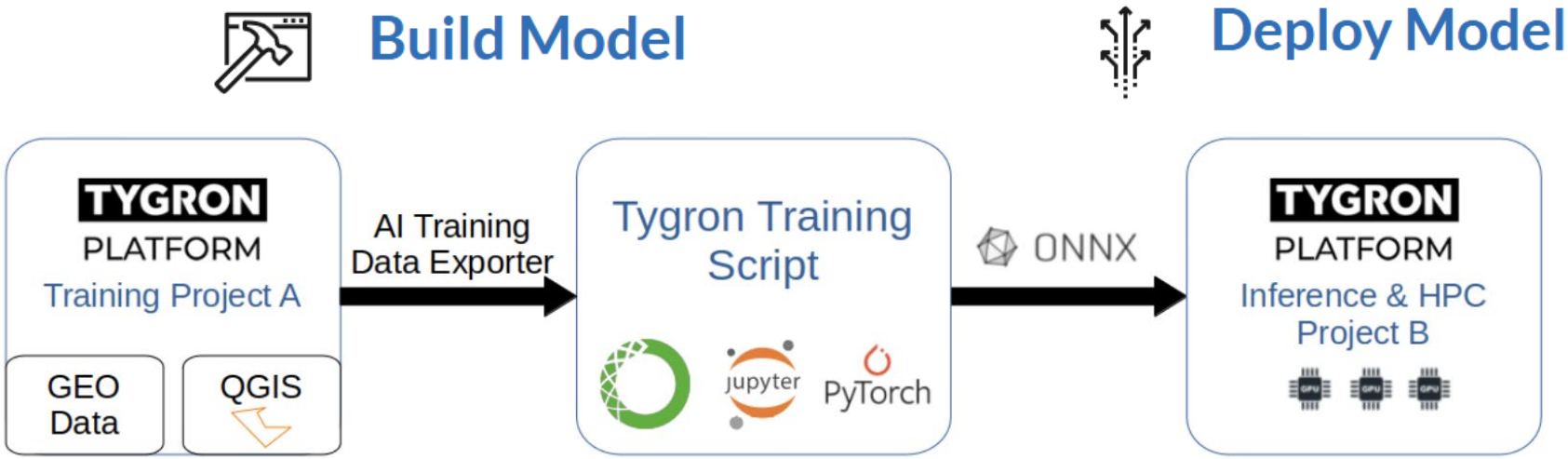
Waarom gebruik maken van AI?



Integreren

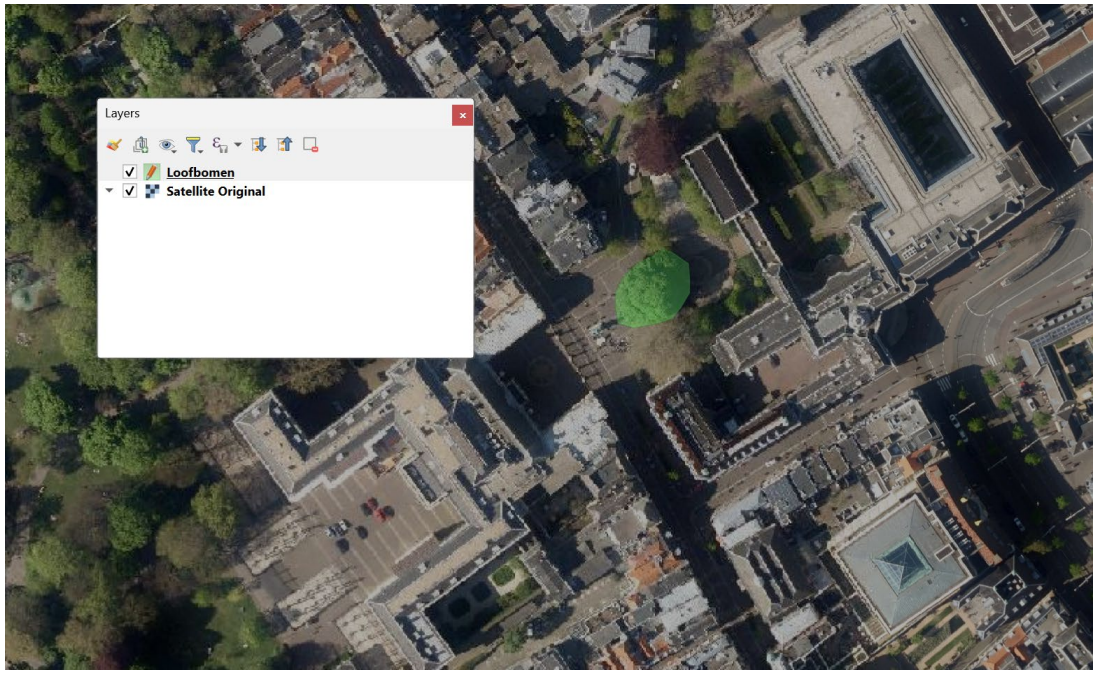


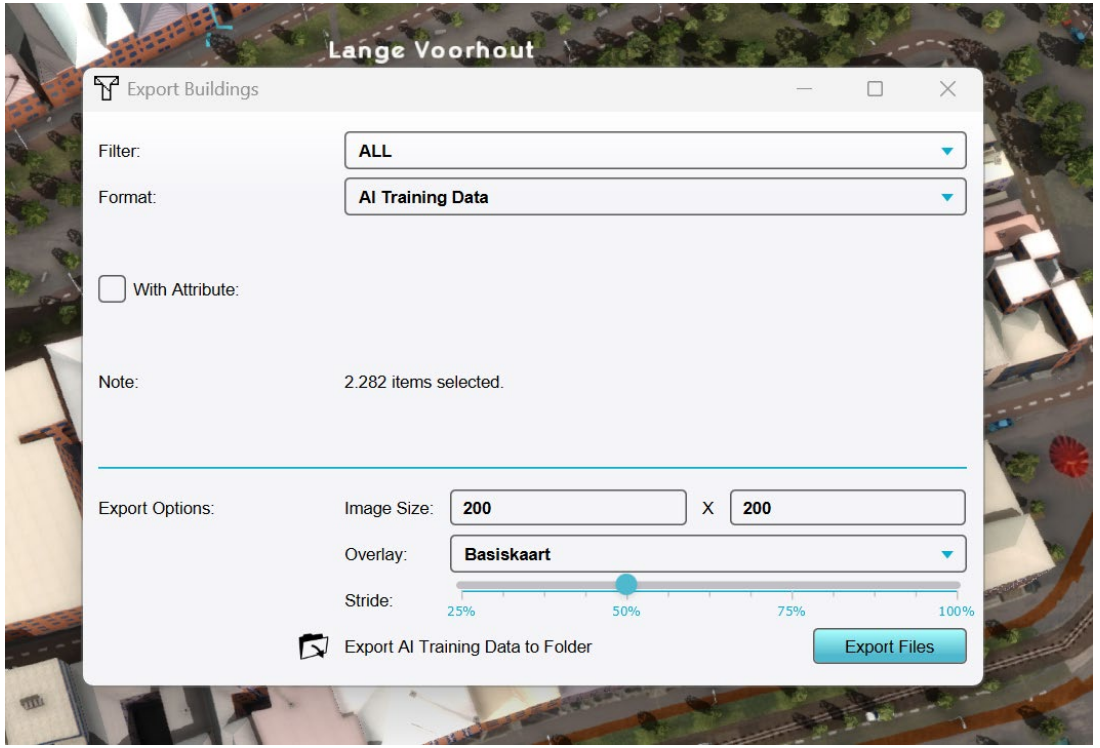
Simuleren


Build Model
Deploy Model
TYGRON
PLATFORM
Training Project A
GEO Data
QGIS
AI Training Data Exporter
Tygron Training Script
jupyter
PyTorch
ONNX
TYGRON
PLATFORM
Inference & HPC Project B

Build Model

Trainingsdata maken met Qgis en Tygron





Build Model

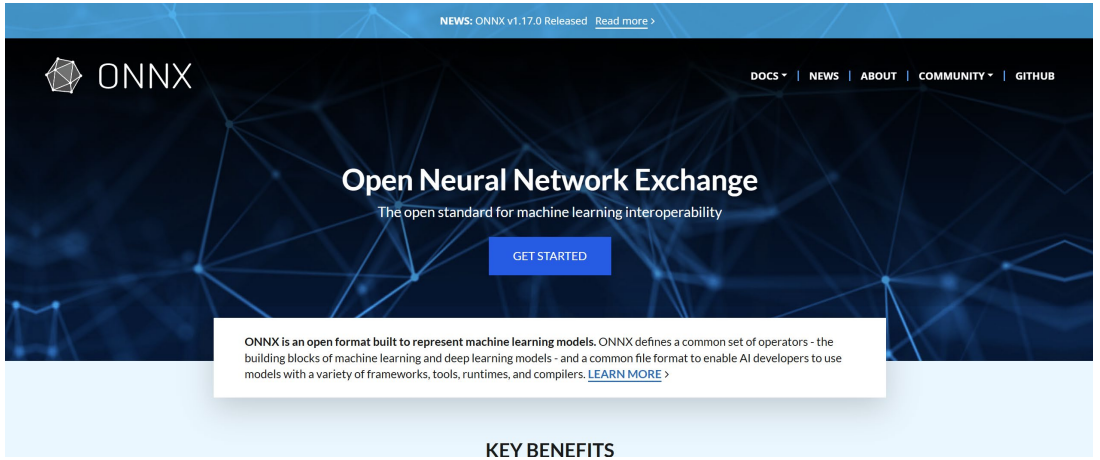
Neuraal netwerk trainen met Python

jupyter example_config Last Checkpoint: 23 minutes ago

File Edit View Run Kernel Settings Help Not Trusted

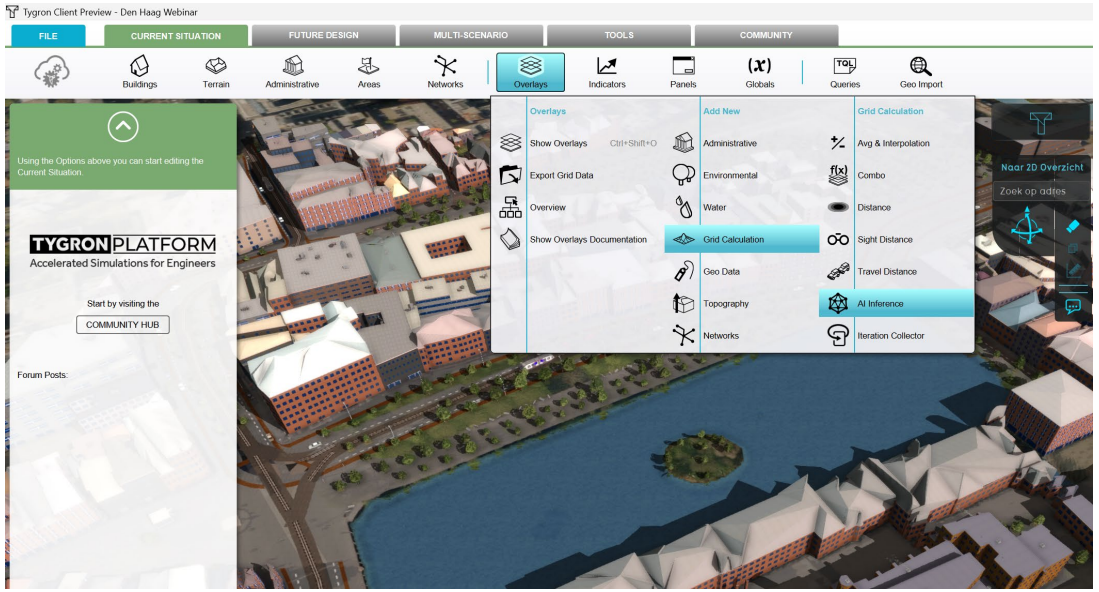
Code JupyterLab Python 3 (ipykernel)

```
[1]: from training_libs import retrievePytorchDetectionLibs
     retrievePytorchDetectionLibs()

[2]: from inference_training import Configuration, ImageDataset
     from inference_training import initCudaEnvironment, createTransforms
     from inference_training import drawImageAndFeatureMasks
     from inference_training import exportOnnxModel, writeONNXMeta, loadONNX
     from inference_training import trainModel, saveModel, loadModel
     from inference_training import createModelInstance, testInference
     from inference_training import logger

[3]: initCudaEnvironment(numCudaDevices=1,
                        visibleCudaDevices="0",
                        clearCudaDeviceCount=False)

[4]: # train on the GPU or on the CPU, if a GPU is not available
     config = Configuration()
     print("Device: " + str(config.device))

     trainDirectory = "<PATH TO TRAIN FILES>"
     testDirectory = "<PATH TO TEST FILES>"

     config.setDatasetPaths(trainPath=trainDirectory, testPath=testDirectory)
     config.setFilePrefix("")
     config.setModelName("mytrainedmodel")
     config.setInputSizes(inputWidth=250, inputHeight=250)
     config.setInputCellSize(cellSizeM=0.25, minCellSizeM=0.1, maxCellSizeM=0.5)
     config.setAutoLimitLabel(False)
     config.setVersion(20250121)

     print("Version: " + str(config.version))

     config.setModelInfo(channels=3, numClasses=2+1,  # (1 + background)
                         bboxOverlap=True, bboxPerImage=250, reuseModel=False)
     config.setEpochs(1)
```



Deploy Model

Uitvoeren van je neurale netwerk in Tygron



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NVIDIA Project DIGITS

A Grace Blackwell AI Supercomputer on your desk.

wered by the NVIDIA GB10 Grace Blackwell Superchip, Project DIGITS delivers a petaflop of AI performance in a power-efficient, compact form fact
th the NVIDIA AI software stack preinstalled and 128GB of memory, developers can prototype, fine-tune, and inference large AI models of up to 20
parameters locally, and seamlessly deploy to the data center or cloud

Largest Companies by Marketcap

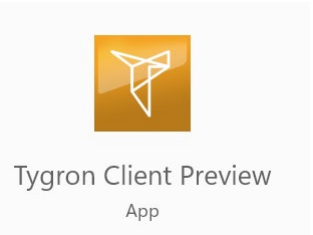
Companies: **10,442** total market cap: **$116.997 T**

Rank by: Market Cap | Earnings | Revenue | Employees | P/E ratio | Dividend % | Market Cap gain | More +

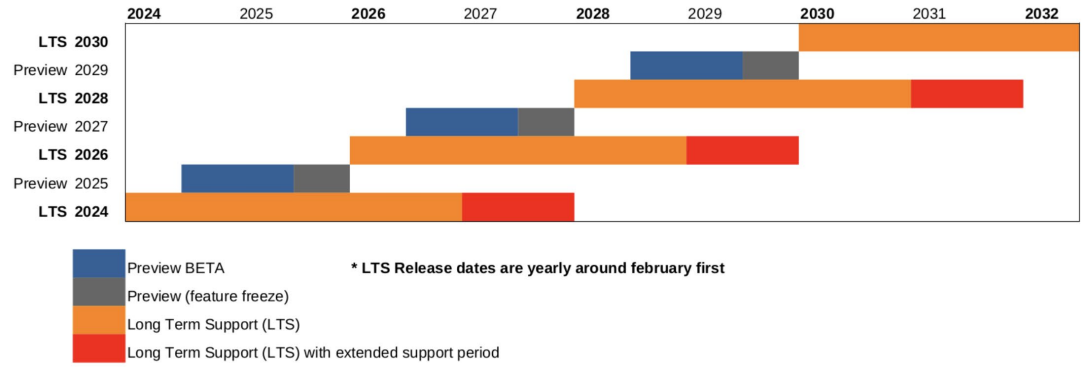
Rank	Name	Market Cap	Price	Today	Price (30 days)	Country
1	Apple AAPL	$3.674 T	$244.60	▲1.27%		USA
2	NVIDIA NVDA	$3.400 T	$138.85	▲2.63%		USA
3	Microsoft MSFT	$3.036 T	$408.43	▼0.51%		USA
4	Amazon AMZN	$2.423 T	$228.68	▼0.73%		USA
5	Alphabet (Google) GOOG	$2.266 T	$186.87	▼0.54%		USA
6	Meta Platforms (Facebook) META	$1.866 T	$736.67	▲1.11%		USA

#GPUs: ANY 0X 1X 2X 4X 8X 9X+ | On-Demand | 95 GPUS | Europe | Price (dec.)

m:32293 vast.ai Type #16904475	host:182369	Iceland, IS	8x H100 SXM	428.2 TFLOPS Max CUDA: 12.6	80 GB 2500.8 GB/s 478.1 GB/s	Motherboard PCIE 5.0,16x 52.4 GB/s	↑4911 Mbps ↓5722 Mbps 799 ports	verified Max Duration 10 days
						Xeon® Platinum ... 160.0/160 cpu 1548/1548 GB	Micron_7450_MT... 4833 MB/s 6478.3 GB	1668.9 DLPerf 79.4 DLP/$/hr Reliability 98.8%
								$21.006/hr RENT
m:20897 vast.ai Type #11429134	datacenter:21357	The Netherlands, NL	4x H100 SXM	214.1 TFLOPS Max CUDA: 12.2	80 GB 2510.8 GB/s	0KK0RG PCIE 5.0,16x 52.7 GB/s	↑346 Mbps ↓903 Mbps 8191 ports	verified Max Duration 4 mon.
						Xeon® Gold 6448Y 64.0/128 cpu 516/1032 GB	Dell NVMe ISE P... 30729 MB/s 5052.6 GB	943.0 DLPerf 98.2 DLP/$/hr Reliability 99.932%
								$9.603/hr RENT
m:31167 vast.ai Type #16495740	host:183033	Poland, PL	4x H100 NVL	214.1 TFLOPS Max CUDA: 12.4	94 GB 1889.6 GB/s	061R8G PCIE 5.0,16x 52.7 GB/s	↑831 Mbps ↓666 Mbps 399 ports	verified Max Duration 10 days
						CPU 128.0/128 cpu 1032/1032 GB	nvme 3926 MB/s 156.0 GB	771.6 DLPerf 96.4 DLP/$/hr Reliability 97.6%
								$8.004/hr RENT

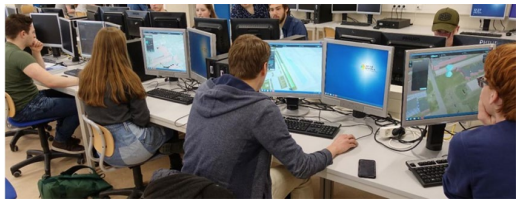


Iedereen met een Tygron licentie kan op de Preview



Tygron zet in op AI

- Samenwerking met:
  - Hogeschool van Utrecht
  - Van Hall Larenstein
- Gratis onderwijslicenties voor universiteiten en hogescholen
- Samenwerken met beroepsgroepen



Hoe gebruiken we AI om neerslag beter vast te houden waar het valt?

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