## neurothink

## Machine learning. Radically accessible.

## neurothink brings the new era of discovery in machine learning.

Trends in business are changing at an ever-growing rate. AI/ML can help your company identify these trends by connecting previously unrelated patterns and discovering networks of causality to give you freedom in your business affairs; strategically, in your transactional business processes and on shop floors across the globe. AI/ML can use sentiment analysis, publicly available web platform data, business news, world events, and your own data to help identify those trends, categorize behaviors, and identify opportunities for improved operational efficiency. However, this work requires data streams, customized decisions at your edge locations, billions of nodes in a neural network, powerful compute hardware, a secure dedicated environment and a cost effective, automated software platform.

ADX Labs' neurothink division has a vision to make powerful and secure machine learning tools accessible to students, data scientists, companies with and without data science departments and universities or labs needing intermittent and dependable access to horsepower to push the boundaries of science and analysis.

neurothink.io was founded to eliminate the frustrations existing on large cloud service provider platforms (fragmented data science interfaces and inefficient GPU access). We are focused on an efficient user experience, we choose and own our hardware, and we have partnered with the best leaders in the industry.

We virtualize the compute resource with extremely low latency (PVRDMA) and couple that with an automated, secure (VMWare VSphere 7) and containerized (Kubernetes) environment.

Within that framework, you can use our tested and pre-defined resources or customize your experience with your choice of models and programming language (MXNet, pytorch, caffe2, tensorflow etc..) depending on your task and level of data science requirements. Offering NVIDIA's NGC catalog accommodates quicker time to solution and less reliance on bias in the underlying and time-consuming process of initial training.

Unlike other cloud compute services, we ensure data security by offering end to end API based security (including VMWare's Carbon Black solution), and our servers are hosted in a dedicated rack space along with our management servers and SSD SAN storage solution. The co-location facility offers access times to major US cities in under 35ms.

If your company doesn't have a data science department, you can work with our data science, analysis and business process experts (Six Sigma, Lean, Kaizen etc.) to work from problem definition, to creating the inference model and integrating the tested solution in your existing infrastructure with our network of proven partners. We also have partnerships to customize deployment in unique edge applications that require low power or limited compute resource (e.g. ARM processors.)

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A low friction process focused on making robust models



Our own dedicated GPU servers offering efficient and low-cost computer



End to end API based security delivered on our own secure hardware



Partners that have

unique IP to deliver ML

models to the edge

Creating a community platform for ML enthusiasts to share and learn

## **CY2021 Statistics**

- Available GPU peak capability 489 teraflops FP32 single precision, and 3.9 petaflops (10<sup>15</sup>) mixed-precision and deep learning
- Greater than 170K CUDA cores
- Available RAM 12.512TB

- All flash on-site storage array greater than 250TB
- GPUs available A100, V100 and T4
- Co-location facility, Energy Star rated, Tier III uptime certified, redundant power, and active cooled cage



