

Deep Learning with IoT Connection

Predictive maintenance, predictive quality and other prediction projects with real-time analyses



Deep Learning Platform including API and tools

Connection of control systems

Retrofit of old production machines

Usable as Datalake supported by Hadoop

Flexible container usage

vCAX-X Deep Learning with IoT Connection

Deep Learning: The revolution for your data

An essential part of the rapid development in the field of artificial intelligence is the technological progress towards Deep Learning.

Deep Learning analyzes data that is collected and stored in almost all companies. Using artificial neural networks, machines solve tasks that are too complex for the human brain. Growing GPU performance has already shortened computing cycles (iterations) from days to hours.

Deep Learning with vCAX-X: Quick Wins with a unique platform solution

In order to analyze data most efficiently and to make accurate predictions, we have developed and perfected our neural networks ourselves. Together with the market-leading hardware, they form a unique solution: vCAX-X.

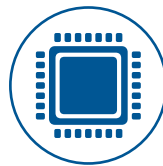
Our Deep Learning platform vCAX-X combines all hardware and software components for successful Deep Learning:



Server



Storage



Processors



Gateways



APIs



Neuronal networks

Deep Learning systems are challenging

Efficient hardware and massive computing capacities for extensive parallel training are characteristic features of a successful project. Companies that embark on Deep Learning projects in „DIY“ mode often reach their limits already in pilot applications. Infrastructure and requirements are often underestimated. Deep Learning with vCAX-X stands for best technology, but also for experience in the application of neural networks, the definition of reasonable use cases, a seamless project flow as well as professional support.

Challenge 1: Infrastructure

The prerequisite for fast and sustainable project success is the right infrastructure with the corresponding equipment. Avoid lengthy and costly experiments with expanding or replacing components. Instead, rely on vCAX-X's proven infrastructure.

Challenge 2: Data for a convincing use case

Deep Learning thrives on Big Data. By means of a neuronal analysis in the initial phase of the PoC, you will find out whether your data is suitable for a meaningful evaluation and successful Deep Learning after a maximum of 4 weeks.

Challenge 3: Time

Although employee capacities are often not available in the own company, quick wins should be achieved. With our 3-phase project processes, we hardly require any support from your IT and deliver a solid business case already in the PoC. Thus, we minimize the time required and the cost risk for you.

End-to-end connection in real-time for the IoT

Gain valuable real-time insights. Flexible gateways extract data directly from the devices (edge) and forward it to the data center in real-time. Using the vCAX-X platform, this data is immediately integrated and analyzed in the neural network.

For data analysis across all industries

The application possibilities of Deep Learning technologies are almost unlimited: Production and value-added optimization, all kinds of forecasts, trend predictions and assessments, planning strategies, analyzing images and much more. There is hardly any industry that vCAX-X is not suitable for:

- Manufacturing companies (value-added optimization in the context of predictive quality and/or maintenance)

- Banks, financial companies, risk analysts
- Insurance
- Public Health
- All companies collecting and evaluating large amounts of data

Three Phases for your entry into Deep Learning



Phase 1: Data check

Within one month, vCAX-X checks whether there are patterns in the existing data and whether these are sufficient for an evaluation. You receive a conclusive business case.



Phase 2: Model refinement

vCAX-X already learns from real data. Our neural networks are individually adapted to the respective application; a suitable model is created which is then trained with your data. vCAX-X is delivered in a stable flight case and is ready for use in only one day.



Phase 3: Integration

vCAX-X passes the training phase and delivers reliable predictions. The system can now switch to real-time mode and analyze data directly via flexible gateways. We will continue to support you until your project is fully implemented.

Your data is safe with us. Thanks to the mobile technology of our unique vCAX-X flight case, your data never leaves your company.

Your Advantages

Real-time connection

Software consistency from edge to data center has been a major challenge. vCAX-X already provides Deep Learning with direct data connectivity. These real-time linked analyses are valuable for all kinds of prediction.

Everything from a single source

You receive all components in a highly scalable platform. For vCAX-X, we combined the most innovative OEM-modified hard- and software to a perfectly operating system.

Consulting with passion and know-how

We are fascinated by the results that Deep Learning offers our customers. Deep Learning is the best way to transform unstructured data into valuable results. For this reason, we do our utmost to find the best use case and implement it together with you.

Data security

You do not need to worry about protecting your data, because your data does not leave your company. For the PoC, vCAX-X is delivered to you in a mobile flight case.

Quick Wins

Avoid additional costs due to expensive planning errors or later changes. vCAX-X delivers fast results and saves you time and money.



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