What is Spartacus?

Spartacus is a modular cognitive system used by the AD Cloud to extract deep insights, often in real-time, from asset, operational and external data sources. It is a key part of AD Cloud’s autonomous UAV initiative. A natural language processing (NLP) digital agent with deep neural learning abilities and a modular architecture, Spartacus can learn specialized skills, developed on a case by case basis.

Real-world insights cannot be easily derived by analyzing some sets of data. All relevant data sources must be considered. With the proliferation the Internet of Things (IoT) and cloud connectivity, data quantity and complexity has increased dramatically.

Big data analytics involves unleashing algorithms on vast amounts of data. Even better when algorithms learn from successes and failures, becoming more accurate over time. This is the promise of artificial neural networks, the technology behind Spartacus.

How it works

Spartacus is based on neural networks, hence the ability for deep learning. By employing its algorithms in a modular fashion, Spartacus can learn different types of skills, providing valuable insights across industries.
The outcome? More valuable insights in less time from complex data with ever-increasing efficiency. However, it’s important that Spartacus is given the right sets of data and not ‘kept in the dark’.

By combining different sets of data, we can obtain even deeper insights. It begins with machine learning, where algorithms are able to recognize patterns in data rather than execute an outcome because of hard-coded programming.

Deep learning works in a framework that is inspired by the structure of the brain – artificial neural networks. Unlike traditional machine learning, deep learning doesn’t reach a point of diminishing returns as data gets more complex.

Spartacus and Flight to the Future

Flight to the Future is an unprecedented initiative created by AD to provide a turn-key process for establishing businesses conducting UAV operations. It is laid out as a training, certification and educational journey.

There are four distinct phases to this journey:

- Basic training and certification
- Clouds, IoT and AI in the drone industry
- Advanced industry training
- Business formation and asset leasing
In Flight to the Future, Spartacus can provide context on different app views as the student navigates through the journey. Similar to an on-demand application help module.

At a higher level, Spartacus can observe the progress a student makes through a lesson and proactively intervene based on the student’s performance.

As your curriculum advisor, Spartacus will keep you informed with progress updates, due dates and next steps.

As the program progresses, the needs evolve. In Step 3, you will be assigned a specialized version of Spartacus, geared towards an industrial application. Best practices and industry insights can be delivered to enrich your training program, whether it be cell tower inspection or border surveillance.

When you establish your business in Step 4, Spartacus becomes a business advisor, providing job leads, helping with scheduling and even keeping track of earnings.

Look out for Spartacus appearing in Flight to the Future in the summer of 2021.

Multi-mode integration

Spartacus can be deployed in just about any digital or electronic environment. With broad integration ability and a powerful NLP (natural language processing) engine, it is accessible via voice command or at the touch of a button—and can follow you as an assistant across different environments.