

SavantX Machine Learning

Introducing a new approach to Machine Learning for Artificial Intelligence

SavantX is a Search & Discovery Platform built to solve the enterprise search needs at heavily regulated nuclear power stations. Artificial Intelligence was needed. And more importantly, a new approach to Unsupervised Machine Learning was required if the SavantX Platform was going to meet its goals as a value priced solution that could be quickly deployed and not require costly monitoring and training as new data was added.

What is Machine Learning?

It is the use of algorithms to create knowledge from data. Think Netflix suggestions or self-driving cars.

Traditional Machine Learning is supervised. It is often trained by a combination of humans and sample data. Unsupervised Machine Learning is exploratory and looks for patterns in unlabeled data and can learn and infer on its own.

Deep learning is an emerging and popular branch of Machine Learning that uses unsupervised learning techniques patterned after how it is thought that the human brain classifies information. Remarkable advances have been made in recent years, but much work remains to reduce the cost of implementation and redesign them, so they are not so easily fooled.

SavantX's New Approach to Unsupervised Machine Learning

Regulatory induced complexity has resulted in the nuclear power industry generating vast quantities of noisy, unstructured data. Traditional and deep learning techniques were quickly determined to be too costly. The SavantX team broke with classic brain emulation theories and developed a new, patent pending approach to Unsupervised Machine Learning. Unlike other unsupervised approaches, SavantX does not require any human feedback and training; either initially or on-going.

Broad Applications for Unlocking Unstructured Data

SavantX's Machine Learning technology can open up opportunities for many Applied Artificial Intelligence applications to help us better understand our world and make better - informed decisions. General Artificial Intelligence also will need to learn in an unsupervised fashion and may well benefit from SavantX's Unsupervised Machine Learning.

An API is being considered to make this technology available to developers interested in classifying, clustering and discovery functions for their apps across any language and data type.