The next level of intelligence: Artificial Intelligence

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Due to rounding, numbers presented throughout this and other documents may not add up precisely to the totals provided and percentages may not precisely reflect the absolute figures.
Behavior predictions with large Neural Networks

- Siemens has been working in the field for more than 30 years
- About 50 key patents for learning processes
- We already use the technology for optimizing complex industrial systems
Our AI system learns from the behavior of a gas turbine in operation as well as data from the fleet.

The Artificial Intelligence autonomously lowers the NO$_x$ emissions.
We use data from operations to adapt and optimize a control policy.

**SIEMENS**

**Classical control loop**

Agent executes the policy on current turbine data to optimize the operation.

Data Store

"Machine" learning loop, using neural networks

Sensor data stream

Selected data

NEW CONTROL POLICY

Machine learning exploits available data to create control policy.

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Siemens has been active in the field of Artificial Intelligence for more than 30 years.

We use our experience in an industrial environment with technologies like (Deep) Reinforcement Learning and neuronal networks combined with domain know-how.

Gas turbines, wind turbines or smart grids and medical imaging systems are optimizing themselves through autonomous learning.

Siemens is leading the way on advanced applications of AI in industrial domains.