

A National Infrastructure for Artificial Intelligence on the Grid

An ARPA-E 2018 Open Innovation Project



Objective: Provide access to a PingThings' big data, real-world sensor data, and educational content to remove any and all obstacles to developing and deploying new analytics using AI and machine learning on the electric grid.

PingThings

1 Provide the Platform

PredictiveGrid™ – The Platform for High Density Telemetry

PingThings will provide its state-of-the-art time series data analytics platform as the brain of the National Infrastructure.

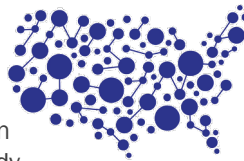
About the Platform

PingThings' PredictiveGrid™ is an advanced sensor analytics and AI platform for ingesting, storing, accessing, visualizing, analyzing, and learning from massive amounts of high-density time series data at scale.

2 Host the Data

Sensor Deployment

We're deploying sensors to generate open data for wide-area monitoring, and to study local dynamics of interest to sensor hosts.



Historical Data

We're ingesting data supplied by industry partners to support exploration and development of new use cases that are relevant to them.



Platform Pilots

Project partners deploy the platform to host their own data. We enable domain experts to interact more easily with their data, streamline data workflows, and prototype new use cases.



Use Case Deployment

Project partners can leverage the NI4AI user community to build and deploy new analytical tools for extracting insights from big time series data.



3 Build the Community

Open Access for the Community

We will build a community around open access data sets created for the national infrastructure which students, researchers, or other stakeholders can use. We support our user community by providing tutorials about data science workflows and by showcasing use cases developed.

High Quality Content

Tutorials, blogs, videos to engage the community.



Data Science Competitions

We'll host competitions focused on engaging industry to inform use case development.



Socialize at Conferences

We're hosting talks, workshops, and panel sessions to train new users and highlight use cases developed.



Who Can Benefit?

Univ. & Students
Researchers & Labs
Utilities & RTOs
Sensor Manufacturers
App. Vendors & Startups

How to Get Involved?

Store & Share Data
Host Sensors
Lab Test Sensors
Analyze & Research Data
Develop Analytic Use Cases