

CHALLENGE TWO

Learning from turbine alarms integrated with SCADA



The Asset

The Levenmouth Demonstration Turbine (LDT) is a unique 7MW Samsung turbine, owned by the Offshore Renewable Energy Catapult and operated by Wood since December 2015. This offshore turbine not only delivers clean energy to the National Grid but allows demonstration of physical and software innovations, allowing technologies to accelerate up the TRL scale.

The Data

ORE Catapult is providing a year's worth of data from 574 different SCADA sensors including component temperatures, pressures, electrical signals and atmospheric conditions and raw alarms.

Industry Context

Turbine alarms are triggered when the turbine shuts down. Typically, many alarms go off in parallel so it can be difficult to determine what caused the shutdown from alarms alone. Integration of SCADA data with alarms would improve any turbine shutdown root cause analysis.



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The challenge

- Participants must combine alarms and SCADA data to enable root cause analysis and learning/knowledge capture
- The participants will be asked to build a model that classifies shutdown event by a root cause