

Title:

Solar, Wind & Hydro Power forecasting

Abstract:

By nature, renewable energies are heavily depending on the current weather conditions. This dependency yields into great challenges to energy suppliers, transmission system operators or commodity trading companies to manage these uncertainties in that. This talk is about introducing the different modeling approaches which involve machine learning methods. For an efficient handling of the proposed modeling a huge amount of weather data is required which can be accessed through in-memory techniques. Finally, it tries to put some spotlight on the underlying problem of numerical weather prediction and how these challenges could be tackled in the near future.