

American-Made Net Load Forecasting Prize

Team: Grid Vision Technologies and Missouri University of Science and Technology

Mission

Develop an accurate, robust, explainable model for net load forecast with high penetration of solar generation.

Team

- **Team Organization:** Grid Vision Technologies and Missouri University of Science and Technology
- **Team Lead:** Rui Bo
- **Team Members:** Ahmad Dehghanzadeh, Ronit Das, Siyuan Wang, Haotian Chen

Approach

Use explainable AI (XAI) and statistical methods to create an ensemble net load forecasting tool. The tool will utilize the historical load data and other available spatial-temporal data, if available, to provide probabilistic forecast of hourly net load at substation level. Recent actual measurements will be used to continuously train and improve the model in real time application. Not only the proposed approach will be able to generate net load forecast, the developed model will be able to explain the influence of different input attributes in generating the forecast result, which can be very useful for different stakeholders in the industry.