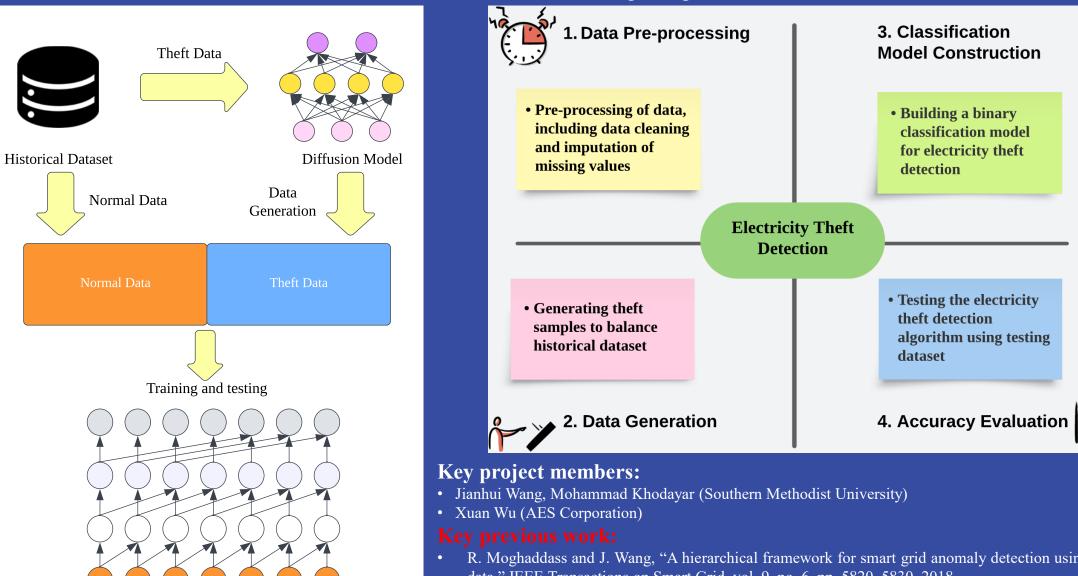
## Deep Learning for Electricity Theft Detection based on Generative Diffusion and Temporal Convolutional Networks

DOE American Made - Digitizing Utilities: Round 2



Classification Neural Network

## 3. Classification **Model Construction** • Building a binary classification model for electricity theft • Testing the electricity theft detection algorithm using testing

- R. Moghaddass and J. Wang, "A hierarchical framework for smart grid anomaly detection using large-scale smart meter data," IEEE Transactions on Smart Grid, vol. 9, no. 6, pp. 5820-5830, 2018.
- M. Yue, T. Hong, and J. Wang, "Descriptive analytics-based anomaly detection for cybersecure load forecasting," IEEE Transactions on Smart Grid, vol. 10, no. 6, pp. 5964–5974, 2019.