

# NIST TE Challenge Phase II

Team: Vanderbilt University

Team leader: Himanshu Neema

Project name: TE Modeling & Co-Simulation Cloud Platform

Simulation tool set: Java, C++, OMNeT++, Simulink, Gridlab-D,..

## Project summary:

Realistic TE simulation results can only be achieved by simultaneous consideration of many different TE concerns that arise from utilities, energy distributors, power markets, regulators, consumers, as well as dynamical aspects that arise due to tight interaction from physical domains such as electrical, mechanical, thermal, structural, and cyber. Thus, evaluating realistic TE scenarios is a highly complex and computationally expensive challenge. Vanderbilt University is developing a web-based modeling & co-simulation environment [[CPSWT-TE](#)] that relies on IEEE High-Level Architecture (HLA) standard and provides cloud-backed experimentation and analysis services. Using this platform, TE evaluators will be able to perform all of their modeling and experimentation tasks using only a web-browser.

