



CHALLENGE #34

BINSSIE-NET-01

Optimal Control and Design of Dynamic Networks

Meet the expectations of this US Node through the technology challenge described below



GOALS

This challenge will explore the optimal control and design of dynamic networks (e.g., power grid system, traffic network) using physical mode, machine learning surrogate, sensing data as well mean field game.

DETAILS

The main objectives are 1) to find an optimal control of the network flow for timely detection of anomaly and reroute of traffic; and 2) to find an optimal design to make the network resilience against adversarial perturbations.

SKILLS REQUIRED

n/a