



Stony Brook University

Energy Workforce Lunch & Learn

Abdelrahim Brown
Director, Energy Innovation (AERTC/GrIDD)

The Moment We're In



What's Driving Change

- More renewables
- More electrification
- More data
- More risk
- More innovation



Engineering Across Disciplines

Energy needs every kind of engineer.



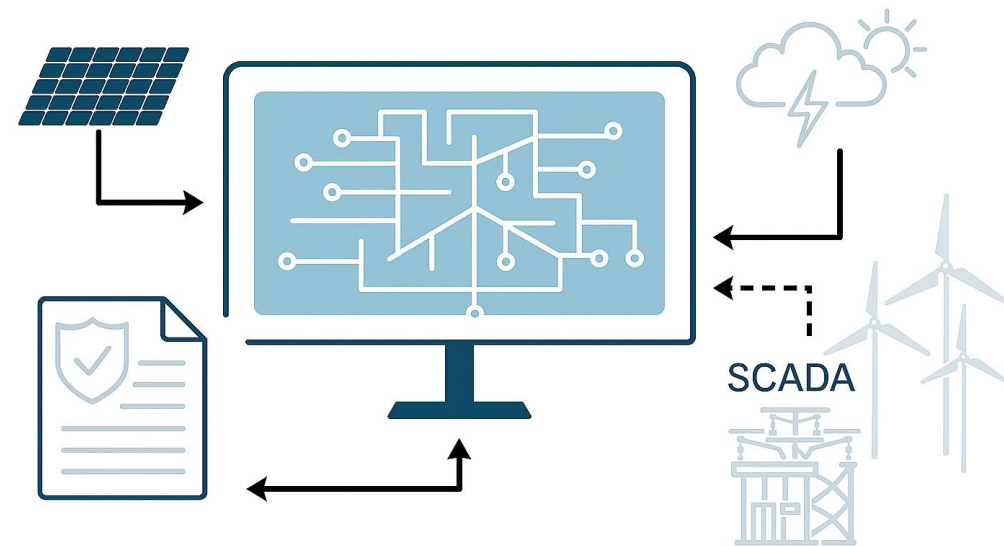
How Skills Connect

Your discipline shapes real solutions.



Digital Twin Studio: Our Shared Digital Testbed

- Real-time simulation of a representative neighborhood distribution network
- Secure data from sensors, AMI, and weather systems
- Use cases: outage & cyber forecasting | vegetation risk | asset health
- Open API and sandbox for partners



HyPower Phase 1: Our Physical Testbed

- DOE-supported hydrogen research platform at AERTC
- Modular containers with electrolyzer and storage systems
- Powered by renewable energy sources (solar and wind)
- Integrated safety, controls, and monitoring systems
- *Enables research and training on emerging hydrogen technologies*



How to Listen Today

- The problems they solve
- The skills they rely on
- Where your major fits

Your Next Steps

Stay curious

Ask questions

Explore projects

Build skills