Harnessing Explainable AI to Accelerate Operational Mesogrids:
Language Models (LMs) + Advanced Math = Sanity

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Intro

Today, users of microgrids are denied many of their benefits because analytics are lacking. **Users with a compelling need for bigger, operational microgrids (mesogrids) require the power of explainable AI.**

Target customers

- Colocated data centers and solar/wind farms
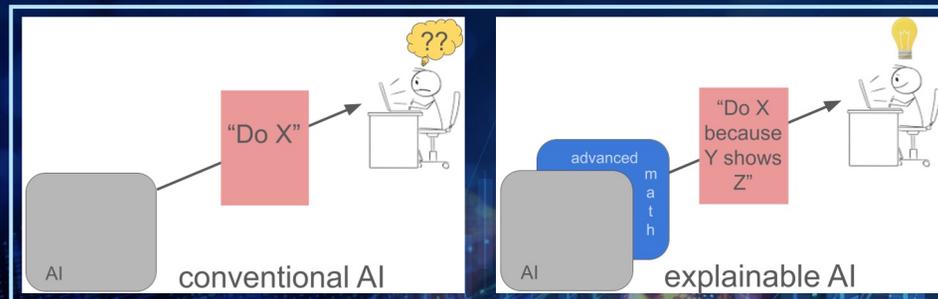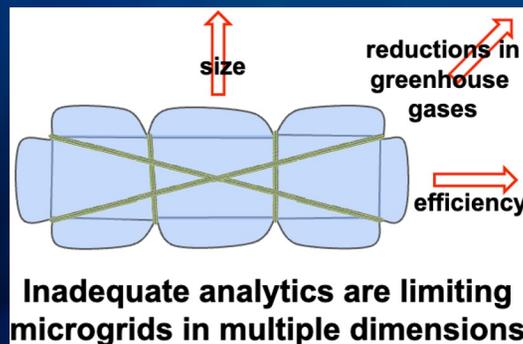- Military bases
- Remote microgrids

Benefits

- Grid operators get better, trustworthy guidance
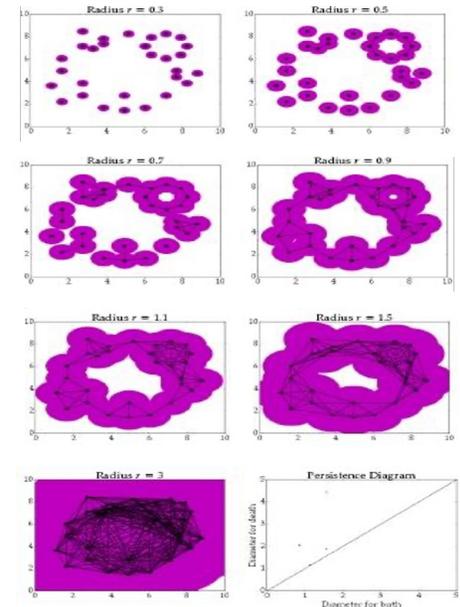- Mesogrids scale as needed
- Path to automation

Methods

- Combine advanced math and logic with LMs
- Use LMs to interact with simulators and microgrid-management software

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Explainable AI Enables Faster Adoption of Operational Mesogrids

Inadequate analytics are limiting microgrids in multiple dimensions

conventional AI — "Do X"

explainable AI — "Do X because Y shows Z"

RESOURCE &TECH

AMERICAN CLEAN POWER

Topological Data Analysis

finding attributes of data that persist through scaling/deformation

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References
- Munch, E. (2017). A user's guide to topological data analysis. Journal of Learning Analytics, 4(2), 47-61.

for more info

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