



# NSF Campus Cyberinfrastructure PI and Cybersecurity Innovation for Cyberinfrastructure PI Workshop

September 23 – 25, 2019 | Minneapolis, MN

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**NSF Program (either CC or CICI):** Campus Cyberinfrastructure (CC)

**Program Area:** Data Driven Networking Infrastructure

**Award# :** 1659255

**PI:** Farzad Mashayek

**co-PIs:** Maxine Brown, Richard Cavanaugh, Cynthia Herrera Lindstrom, Simon Alford

**Project Title:** Building HPRNet (High-Performance Research Network) for Advancement of Data Intensive Research and Collaboration



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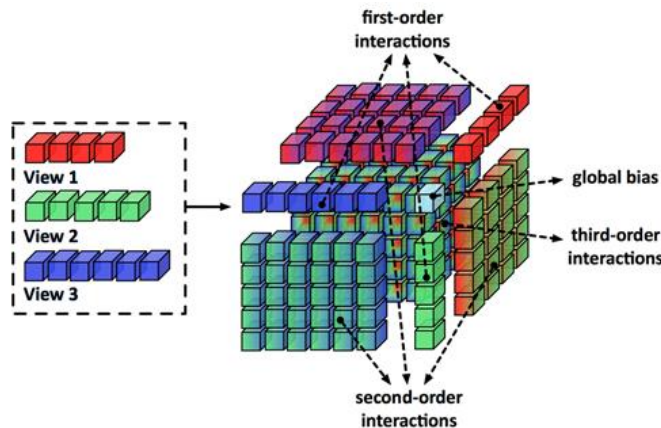


## Quad Chart for:

### ***Building HPRNet (High-Performance Research Network) for Advancement of Data Intensive Research and Collaboration***

#### **Challenge(s):**

- Provide last-mile R&E network connectivity to researchers
- Build a fully-functioning Science DMZ at UIC
- Raise awareness about Science DMZ and its benefits among researchers

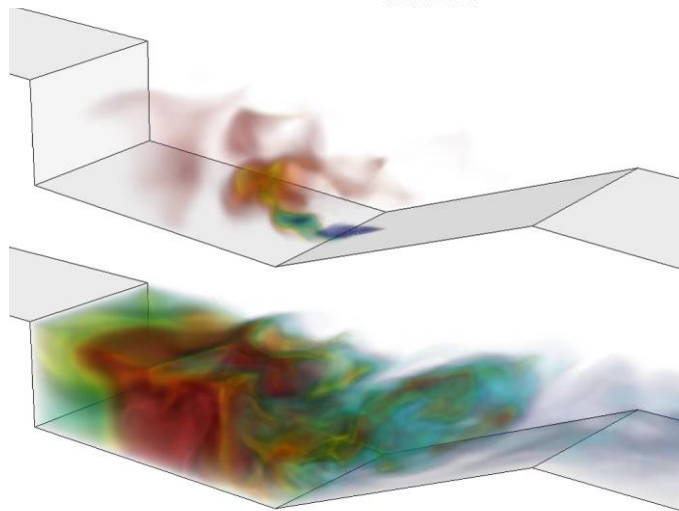


#### **Broader Impact(s):**

- Enable multi-site collaborations across the region and the nation
- Facilitate remote experimentation on nationally funded instrumentation
- Advance basic understanding of Big Data problems and role of High-Performance Networks in research

#### **Solution(s):**

- Extend existing campus research network to more buildings
- Develop capability to detect and correct bottlenecks in the research network
- Allow researchers to seamlessly and reliably transfer big data sets across other institutions via GridFTP and DTN.



#### **Metadata tag:**

- <https://acer.uic.edu/networking/research-network/>
- *Physical connections completed, installing underlying switching*
- *Planning on procuring Globus license for our DTN*
- *Need to attend more technical trainings on DMZ components*