

# RESEARCH TECHNOLOGIES

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# **HPC in Cloud or Cloud in HPC: Myths, Misconceptions and Misinformation**

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# What is Jetstream and why's it relevant?

- NSF's first production cloud facility
- Provides **on-demand** interactive computing and analysis or persistent services such as gateways
- Enables configurable environments; **programmable cyberinfrastructure**
- 413 active XSEDE projects covering 75 fields of science and **2558 active users** representing **190 institutions**



Wed 2:30 PM – Jetstream Overview in IU Booth #2400

Wed 5:15 PM BoF – Cloud Infrastructure Solutions To Run HPC Workloads



# Myths & Misconceptions

Flickr: Daniel Kulinski – Failure of Cloud Computing



- ~~Video~~ Cloud killed the ~~radio-star~~ HPC system
- The cloud is **always** available
- HPC is **always** faster
- Reproducibility and complexity
- **"I don't need it."**



# Workforce development & Training

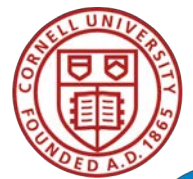
Jetstream REU Program 2018 – courtesy UITS ITCO



- Commitment required
- Hard things can be easy; easy things hard
- Requires many to exit their comfort zone



# Jetstream partners



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