PH.D. IN SYSTEMS

ACCEPTING APPLICATIONS NOW FOR FALL 2020
DEADLINE TO APPLY: JANUARY 15

Graduates of the program will find employment in a variety of fields, including academia and public, private and governmental agencies specializing in energy, healthcare, defense, aerospace, information technology, policy making, etc.

ACTIVE AREAS OF RESEARCH

- Multi-agent simulation framework for cooperative observing systems of systems
- Patterns in architectural decisions and fast problem formulation in system architecture
- Extreme weather forecasting using constellations of nanosatellites
- Improved human-computer interaction for design of complex systems
- Integrated materials and process design for carbon capture systems
- Cyber-physical infrastructure and informatics for healthy living in smart cities
- Enhancing the food security through sustainable regional food systems development
- Forecasting evacuation behaviors of coastal communities in response to storm hazard information
- Willingness to improve the resiliency of new york city’s transportation system
- Pharmaceutical manufacturing modeling and control
- Systems design of chemical manufacturing from shale gas

RESEARCH VISION FOR SYSTEMS@CORNELL

- Strongly rooted in Cornell identity
  - Rigorous theoretical foundations
  - Disciplinary breadth
  - Integrative and multi-disciplinary
- Focused on solving global societal challenges
  - Water-food-energy nexus
  - Global climate change
  - Built environment, infrastructure, transportation, energy, manufacturing

“THIS PROGRAM IS NOT ABOUT LEARNING EXISTING TECHNIQUES. THESE ARE PEOPLE WHO ARE GOING TO CREATE THE STATE OF THE ART... AND SO WHO DO YOU TURN TO WHEN APPROPRIATE TECHNIQUES DON’T EXIST FOR INNOVATING COMPLEX SYSTEMS? THAT’S A SYSTEMS PH.D. ”

– Pat Reed, Professor, Systems Engineering Field Faculty Member

For more information:
http://www.systemseng.cornell.edu/academics/phd/