Aspiring PI Info:

· Name: Lipsy Gupta

· Position: Postdoctoral Fellow

· Affiliation: Kansas State University



Research interests:

- Ph.D. in Mathematics (Analysis and Topology)
- Formal Verification
- Safety and Reliability of AI-enabled CPS
- Differential Privacy

Current Project(s):

- Safety Verification of Neural Networks
- Safety Verification of CPS with Anytime Sensors
- Verification of Differential Privacy of Online Algorithms

Project Idea(s):

- Proof Transfers in Evolving Systems
- Abstraction-based techniques for Neural Network Verification
- Formal modeling and verification of ROS
- * Education and Outreach: promote women in computing; starting at high school level

Collaborators Sought:

- Formal Methods: Mathematical foundations for safety and privacy of AI
- * In the Field: Robotics and AI researchers, CPS, labs, companies