1. Stuart Steiner, Eastern Washington University – transforming an Edurange lab to a GENI lab
   a. Edurange – nmap, scanning lab, total recon, ssh lab for club learning
   b. SSH Lab from edurange – how can we transfer this on GENI?
      i. Entry point
      ii. Scan
      iii. Ssh to an address
   c. Challenge1: how to make ssh from node to node?
   d. Challenge2: how to hide a topology from students to make scan interesting?

2. Jacob Barnard, University of Jamestown – tiered repetitive approach
   a. Openflow failover idea
   b. Simulate difference between physical issue and virtual
   c. Openflow groups to negotiate redundant links
   d. Good: Found the original RSpec and instructions from past failover lab, maybe end of semester project for CS students to teach redundant links
   e. Problems – old RSpec. Solution: write a script that sets up the exercise
   f. Several classes this can be used

3. Julie Henderson, Charleston Southern University, Walter Kerner, Fashion Institute of Technology
   a. An industry scenario on GENI – firewall good practices and closing the open services that are not needed
   b. Explain expectations, what should the network allow and not, a critical thinking exercise
   c. Open source firewalls on GENI
   d. Different Servers behind a firewall, users and attacker
   e. Openflow tutorial: how can we virtualize the firewall function?
   f. Wrong traffic to the wrong place – a good learning moment for students to differentiate services
   g. Port business-purpose matching, directionality, geolocation
   h. Data analysis to find unsolicited traffic

4. Brian Barnard, SUNY Postdam
   a. Online networking and games: what does this involve?
   b. Distributed vs centralized servers
   c. Setup a game server on GENI, watch the traffic flow, latency
   d. How can we cheat the game? See the next frame info, find game server vulnerabilities and fixes.
   e. Wireless networking and game traffic
   f. Ethics – build a network that allows one to view a data broker’s view of networking
   g. Simulate female, male from traffic pattern, geopattern – Mobile emulators on GENI instances

5. Roberto Hoyle, Oberlin College
   a. SEED Labs on GENI – network that is not controlled by school IT
   b. Buffer overflow or XSS SEED Labs on GENI
c. Privacy related project related to tracking
   i. Advertising on a website is not direct, it may be through a third party
   ii. Monitor traffic that sends private information
   iii. Tracking awareness – many interested parties may be tracking you, not
       just the direct website that you have accessed
6. Ameen, Jonathan
   a. Use the wireless infrastructure to execute man in the middle
   b. Shows important of encrypted traffic
   c. IoT testbed on GENI – install BusyBox
   d. Demonstrate the flaws in the wireless setup
7. Mohammad Azhar, BMCC City University of NY
   a. Advanced cyber security – traffic, IDS, progress in levels
   b. CS0 course on cyber security – Cyber for All (Townson U.)
   c. Cyber security across curriculum – good cyber citizenship, a module is easier to
      adopt than a whole course
   d. Engage high school teachers, not just students
   e. Educate parents about the dangers of buying a phone for a 10-year old
8. Selvarajah Mohanarajah, UNC Pembroke
   a. Infusing security to all CS courses
   b. Challenges of hands on labs: ASLR, NX-bits
   c. Use GENI to setup a vulnerable VM, do a buffer overflow to become admin
      (Level 1). This project can also be done with docker
   d. Intro to computer architecture class – Level 2
9. Athar Rafiq, Mount St. Mary University
   a. Use GENI and improve experience in computer networks class
   b. Materials from GENI to start with basics, have a checklist of what you need to
      run a class (Train the TA slides and video from webinar)
   c. Used GNS3 - runs VMs behind each icon