Salukis Secure 16th Position in DoE's CyberForce Competition 2022

A team of Computer Science graduate students from SIU School of Computing, *CyberSalukis* (Team-108), placed 16th in the nation in Department of Energy's CyberForce Competition held on November 5, 2022. The participating Salukis were Ismail Hossain (CS PhD), Tyler Joseph (CSCS MS), Mohammad Mashud Nesary (CS MS), Sai Mani Teja Puppala (CS PhD), Trenton D. Spencer (CS MS), and Robert Wigfall (CS MS). CyberSalukis were mentored by Dr. Sajedul Talukder, Assistant Professor, School of Computing and the Director of Security and Privacy Enhanced Machine Learning (SUPREME) Lab.

Security is becoming a top concern because of the growing amount of technology on the internet. In order to practice interactive, scenario-based events where participants engage in cybersecurity activities including methods, practices, strategy, policy, and ethics, the Department of Energy (DOE) is leveraging the expertise of current national laboratory staff that has previously hosted four successful cyber defense competitions. The DOE has sought to enhance 1) knowledge of the critical infrastructure and cyber security nexus, 2) awareness of hands-on cyber education to college students and professionals, and 3) a fundamental understanding of cyber security within a real-world context. This year's CyberForce Competition included a range of CyberSecurity activities related to renewable energy scenario involving an electric vehicle manufacturing plant and its solar power generation facility.

Total Score Ranking	School (Team Name) - Team No.	State	Total Score	Total Score Percent
1	University of Central Florida (A Team with a Dream) - 27	Florida	8656	87%
2	University of Central Florida (The Borg Collective) - 28	Florida	8044	80%
3	Penn State University (Cyber Lions) - 17	Pennsylvania	7872	79%
4	Carnegie Mellon University, Silicon Valley (TBD) - 57	California	7846	78%
5	Lewis University (Order of the Purple Flamingo) - 12	Illinois	7719	77%
6	University of Texas, San Antonio (Roadrunners) - 37	Texas	7715	77%
7	Tennessee Technological University (CyberEagles) - 22	Tennessee	7609	76%
8	DePaul University (Security Daemons) - 6	Illinois	7588	76%
9	University of California, Santa Cruz (Cyber Slugs) - 126	California	7517	75%
10	Oregon State University (OSUSEC) - 16	Oregon	7479	75%
11	Baldwin Wallace University (CyberSec Jackets) - 1	Ohio	7392	74%
12	Illinois Institute of Technology (Illinois Tech CyberHawks) - 81	Illinois	7278	73%
13	United States Coast Guard Academy (Alternative_Success) - 24	Connecticut	7257	73%
14	West Virginia University (Cyber Mountaineers) - 159	West Virginia	7252	73%
15	Stanford University (Stanford Applied Cyber) - 111	California	7229	72%
16	**Southern Illinois University (CyberSalukis) - 108**	**Illinois**	**7134**	**71%**
17	Indiana Institute of Technology (Indiana Tech Cyber Warriors) - 9	Indiana	7112	71%
18	Dakota State University (Fire Breathing Rubber Duckies) - 5	South Dakota	6907	69%
19	University of Maryland, Baltimore Country (Cyber Dawgs) - 31	Maryland	6877	69%
20	Texas A&M University (ret2rev) - 115	Texas	6873	69%
21	New York University (NYUSEC) - 90	New York	6830	68%
22	United States Military Academy (BitsForEveryone) - 122	New York	6805	68%
23	Virginia Tech (PWN@VT) - 40	Virginia	6801	68%
24	Loyola University Chicago (The Sister Jean Dream Team) - 13	Illinois	6756	68%
25	Purdue University Northwest (PNW Cybercorps) - 18	Indiana	6675	67%
26	Illinois State Univeristy (Redbirds A) - 82	Illinois	6611	66%
27	University of California, Santa Cruz (Bing Chilling) - 127	California	6581	66%
28	University of Nevada, Reno (Nevada Cyber Club) - 32	Nevada	6487	65%
29	University of Florida (Kernel Sanders) - 132	Florida	6466	65%
30	Portland State University (Viking-Sun-2) - 95	Oregon	6458	65%

144 teams from 108 unique institutions across United States participated in this year's CyberForce Competition. The SoC team, CyberSalukis, ranked 4th among the 12 participating teams from the state of Illinois. Another team from SIU, *Security Dawgs* (Team-107), secured 41st place in the competition.

U.S. DEPARTMENT OF ENERGY'S

CYBERFORCE COMPETITION®

DEFENDING U.S. ENERGY INFRASTRUCTURE

November 4, 2022
Hybrid

Number of Teams	Max Team Points Received	Min Team Points Received	Mean Team Points Received	Total Points Possible
144	8,656	1,068	4,832.89	10,000

SOUTHERN ILLINOIS UNIVERSITY SCORECARD

TEAM # 108
This table highlights the *team's* efforts for the 2022 CyberForce Competition®.

Scoring Category	Team Points	Percent of Points per Category	Team Ranking
Anomalies	1365	68.25%	20
Security Documentation	867	86.70%	29
C-Suite Panel	873	87.30%	37
Red Team	1202	48.08%	16
Service Scans	1947	97.35%	55
Green Team Surveys	880	58.67%	20
Overall	7134	71.34%	16

The school of Computing team also participated in CyberFoce Competition 2021 where they ranked 13th in the nation.