

## **CAPABILITY STATEMENT: CYBERSECURITY**

### **UNIVERSITY OF NEVADA, LAS VEGAS, HOWARD R. HUGHES COLLEGE OF ENGINEERING**

**POC Information:** Mohamed B. Trabia, Ph.D., ASME Fellow

Associate Dean for Research, Graduate Studies, and Computing and Professor of Mechanical Engineering

Phone: (702) 895-0957 Email: [Mohamed.Trabia@unlv.edu](mailto:Mohamed.Trabia@unlv.edu)

For further information: <https://www.unlv.edu/engineering/research>

#### **OVERVIEW**

UNLV prepares undergraduate and graduate students to meet the demand for trained, skilled, and certified IT talent in response to the expanding supply of qualified workforce across the country. To address these needs, UNLV has developed a Master's degree and a Graduate Certificate in Cybersecurity. These programs ensure that participating students are exposed not only to the hard skills related to the hardware and software aspects of cybersecurity, but also to the managerial skills of controls, risk management, audit, governance and strategic management.

#### **RESEARCH CAPABILITIES**

##### **Cybersecurity Computing Laboratory**

The Cybersecurity Computing Laboratory houses machines that authenticate to a Windows Active Directory domain. Students can access three general purpose remote login servers. There are two distributed clusters - one hardware and one virtual. There is also a web server, which allows students to write web applications.

##### **National Supercomputing Center Resources - Cherry Creek Supercomputer:**

We have access to clusters and cloud computing at the National Supercomputing Center.

- The Cherry Creek Supercomputer was ranked on the Top 500 list. It has 26,000 cores, theoretical peak speed of 500 TFlops/s (Trillion Floating-Point operations per second), total memory of 32 TB (TeraBytes), and total scratch storage of 46 TB. The computer has heterogeneous Intel Xeon E5-2697v2 12C 2.700GHz, Intel Truscale, Intel XeonPhi 7120P, and Intel XeonPhi 31S1P cluster.

#### **PAST PERFORMANCE**

Department of Defense, National Science Foundation, National Security Agency, Defense Advanced Research Projects Agency (DARPA)