

Institute for Cyber Security



Big Data Applications in Cloud and Cyber Security

Prof. Ravi Sandhu Executive Director and Endowed Professor

UTSA COB Symposium on Big Data, Big Challenges March 17, 2015

> ravi.sandhu@utsa.edu www.profsandhu.com www.ics.utsa.edu



Big Data



Volume

Variety

Velocity

Veracity

Volatility



Big Data



- Big Data and Cloud
 - Cloud is a source for big data
 - Big data processing in the cloud
- Big Data and Cybersecurity
 - Security data is big data
 - Big data needs protection



Big Challenges



- > Finding trends versus needles
- Bad science

- Ownership and exclusivity
- > Academic research

- > Automation
- Societal impact
- > Internet of things