

# NICE

NATIONAL INITIATIVE FOR **CYBERSECURITY** EDUCATION



## Pipeline Initiatives: Reaching Middle School, High School, and Community Colleges

# ROLE of COMMUNITY COLLEGES in CYBERSECURITY EDUCATION

## STUDENTS:

- Educating and graduating students for workforce
- Preparing students for transfer to BS institutions

## INDUSTRY:

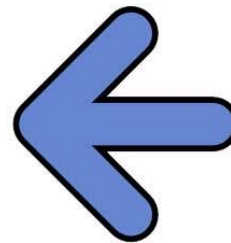
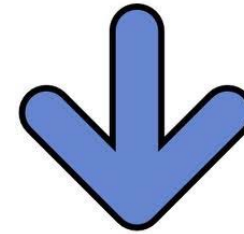
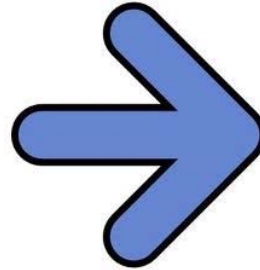
- Training / retraining workers in different aspects of cybersecurity
- Providing certification training to students/workers

# ROLE of COMMUNITY COLLEGES in CYBERSECURITY EDUCATION

## EDUCATION:

- Providing professional development to K-12 teachers
- Assisting in the development of K-12 curriculum
- Providing outreach activities to K-12 students
- Providing professional development to faculty

# Role of Community Colleges



## ACCOMPLISHMENTS

- 47 community colleges have CNSS 4011 certification in 20 States
- 22 community colleges have CNSS 4011 + one certification in 12 states
- New Center of Academic Excellence Two Year, CAE2Y designation established in 2010
- 13 CAE2Y institutions in 7 states
- 9 community colleges eligible
- Increasing enrollments in cybersecurity education

## National Scene

- 3 regional ATE (Advanced Technology Education) centers in USA (CyberWatch, CSSIA, CSEC)
- Curriculum development and standardization
- Faculty professional development
- K-12 Outreach
- Student Competitions such as:
  - Collegiate Cyber Defense Competition, CCDC
  - Forensic Cup
  - Poster competition

# CHALLENGES

## EDUCATION:

- Standardization of the curriculum
- Articulations with baccalaureate programs
- Faculty capacity
  - Faculty numbers
  - Preparation
  - Professional development
- Internal and external support
- Expansions of institutions with CNSS certifications and CAE2Y designations

# CHALLENGES

## INDUSTRY/GOVERNMENT:

- Recognition of community college graduates and their role
- Support for community colleges
  - Student internships
  - Faculty externships
  - Hiring of com. coll. Graduates
  - Changing the perception
- Serving on Advisory Boards/committees





# THANK YOU