

# NIST RAMPS: Building America's Cybersecurity Workforce

The Regional Alliances and Multistakeholder Partnerships to Stimulate (RAMPS) program addresses America's critical cybersecurity talent shortage through strategic collaboration.

This National Institute of Standards and Technology initiative aligns education with education with industry needs across regions nationwide.



by Dr. John Sands



### **Our RAMPS Team**

#### **Our Team**

- •Dr. John Sands Project PI, NCAE Educational Pathways National Center
- •Dr. Kristine Christensen Faculty, RAMPS Director
- •Stanley Kostka RAMPS Community Director, Former Midwest NCAE
- •Jiri Jirik Project Manager, Industry Certification Expert
- •Michael Gonzalez Project Graphic Artist, Publications, and Social Media

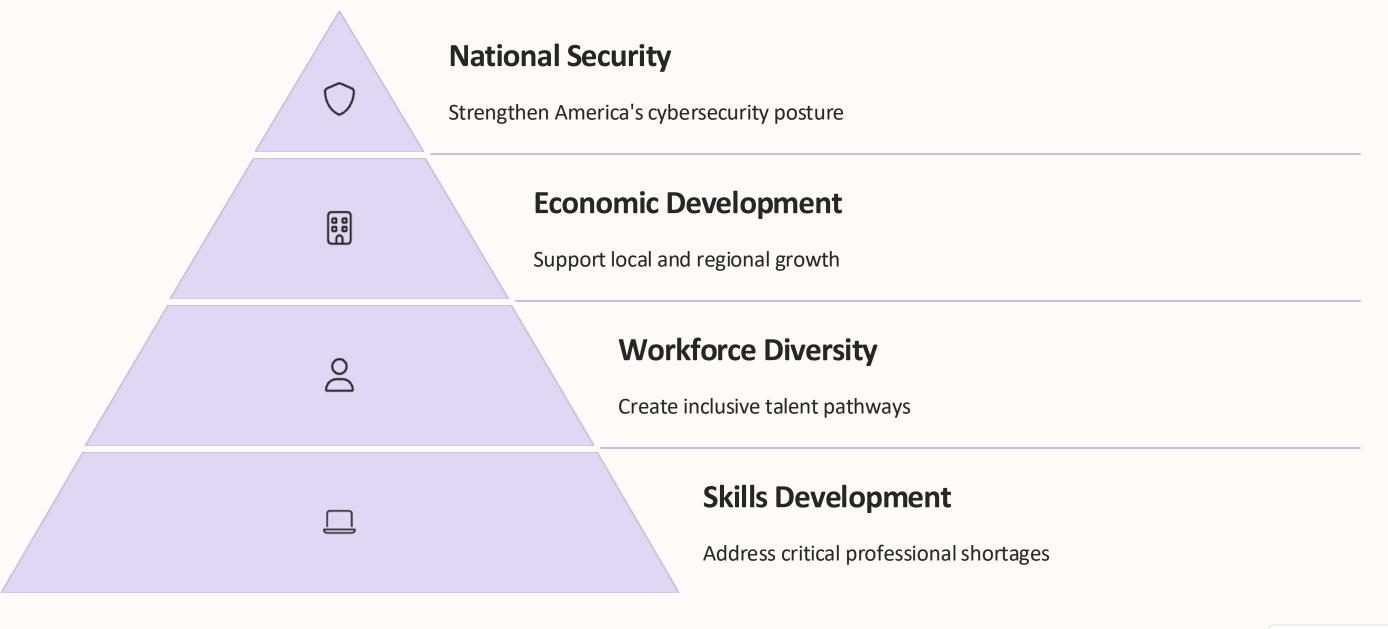








### **RAMPS Program Objectives**





### **Key Stakeholders in RAMPS**

#### **Academia**

CAE Institutions, Universities, Colleges, Community

Community Colleges, and K-12 schools

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#### **Local Employers**

Businesses and industry partners needing needing cybersecurity talent

# Non-Profits & Community Groups

Supporting workforce development initiatives

#### **Government Agencies**

Federal, state, and local partners





### **RAMPS Funding and Support**

\$3.6M

**Total Funding** 

Cooperative agreements awarded in 2024

18

**Organizations** 

Education and community groups funded

\$200K

**Per Organization** 

Average grant to each recipient

**15** 

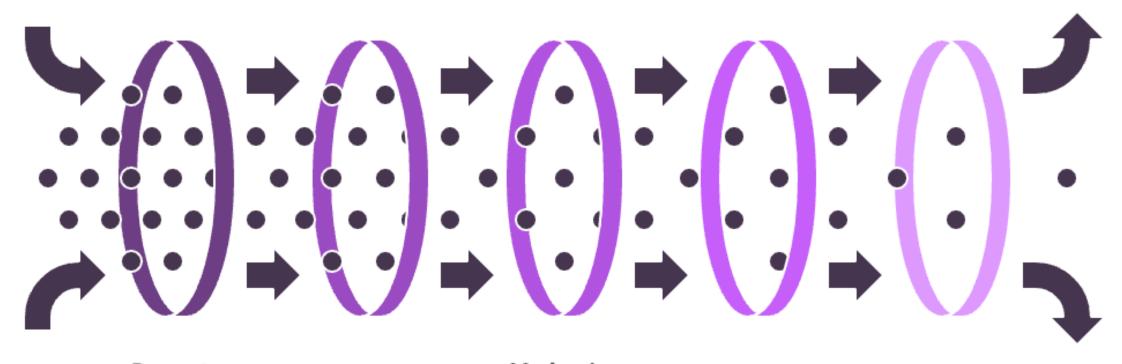
**States** 

Geographic distribution of recipients



# **RAMPS Project Goals**

**Building a Skilled Cybersecurity Workforce** 



#### Promote Career Discovery

Highlighting diverse career pathways

#### Transform Learning

Developing effective educational pathways

#### Modernize Talent Management

Updating processes to fill skills gaps

#### Expand NICE Framework Use

Implementing structured workforce development

#### **Drive Research**

Innovating effective workforce practices



### **RAMPS Project Examples**





Creating specialized cybersecurity courses for high high schools and colleges. colleges.



# Work-Based Learning

Coordinating internships and apprenticeships with industry partners.



## Competitions & Bootcamps

Running hands-on cybersecurity challenges and intensive skill-building programs.



# Professional Development

Delivering training for educators and career-changers.



# **Economic Development**

Delivering training for educators and career-changers.



## NICE Cybersecurity Workforce Framework



#### **Standardized Taxonomy**

Defines cybersecurity work roles, tasks, and capabilities



#### **Education Alignment**

Maps curriculum to industry-needed skills



#### **Career Pathways**

Creates clear advancement opportunities

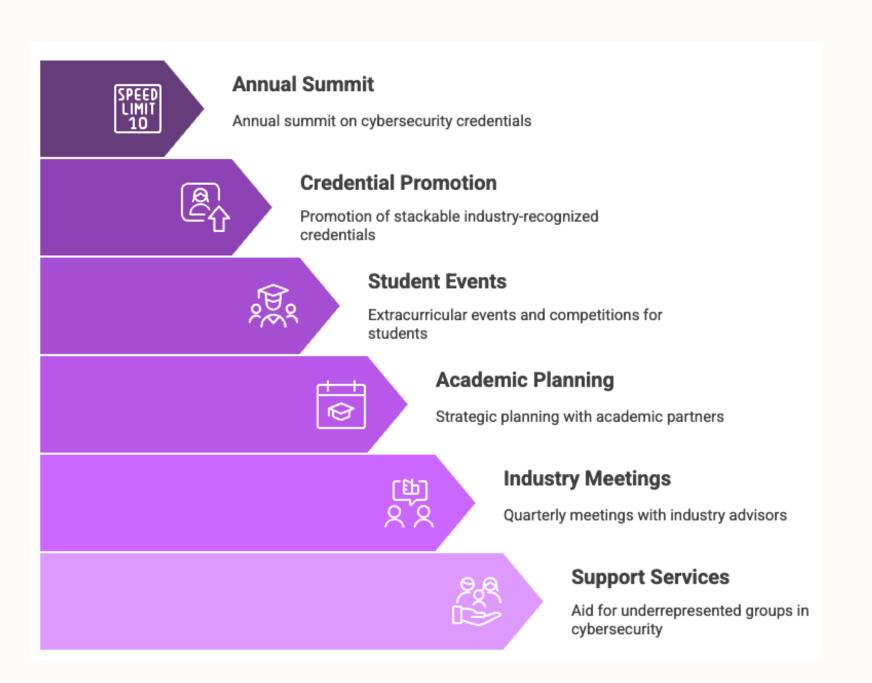


#### **Industry Integration**

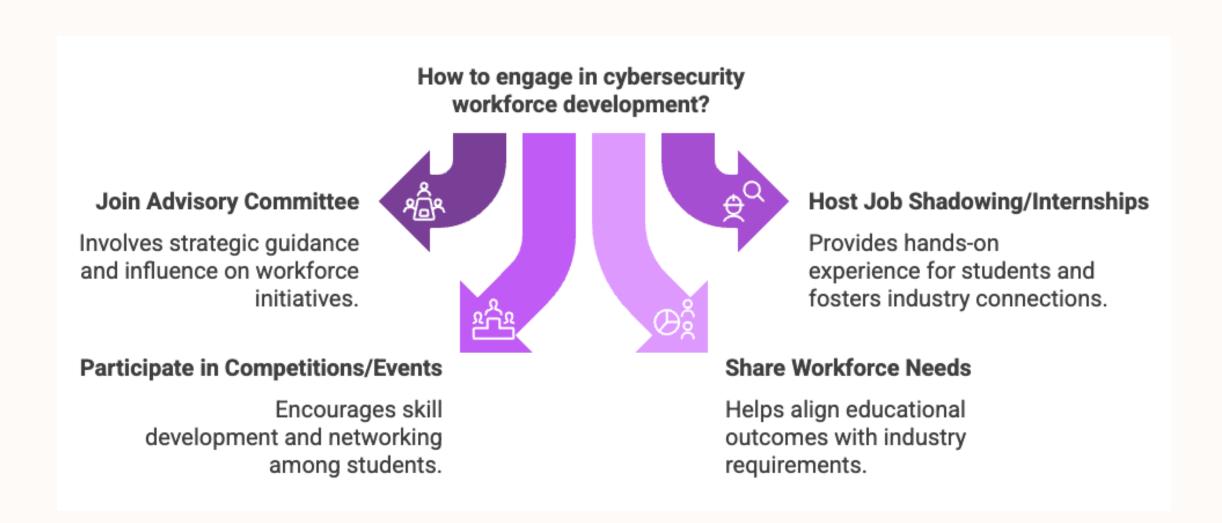
Ensures workforce readiness for employers



### **Core Activities**



### **Getting Involved**



### **Impact and Outcomes**

