

Creating IT Apprenticeships

Pathways to Tech Careers through Apprenticeship

Debby Hopkins, U.S. DOL Registered Apprenticeship Intermediary

CTE Experience Works 2024:
Pathways for the Future

U.S. DOL Registered Apprenticeship Industry Intermediary

1. National Partners US Office of Apprenticeship

**2. Subject Matter Expertise for RA Program
Development, Launch, and Expansion**

3. Technical Assistance & Partnership Building

4. DEIA Support

<https://www.apprenticeship.gov/investments-tax-credits-and-tuition-support/registered-apprenticeship-industry-intermediaries>



Information Technology

Computer & IT Occupations are projected to grow much faster than average

In May 2023, the median average wage was \$104,420 vs \$48,060 for all occupations

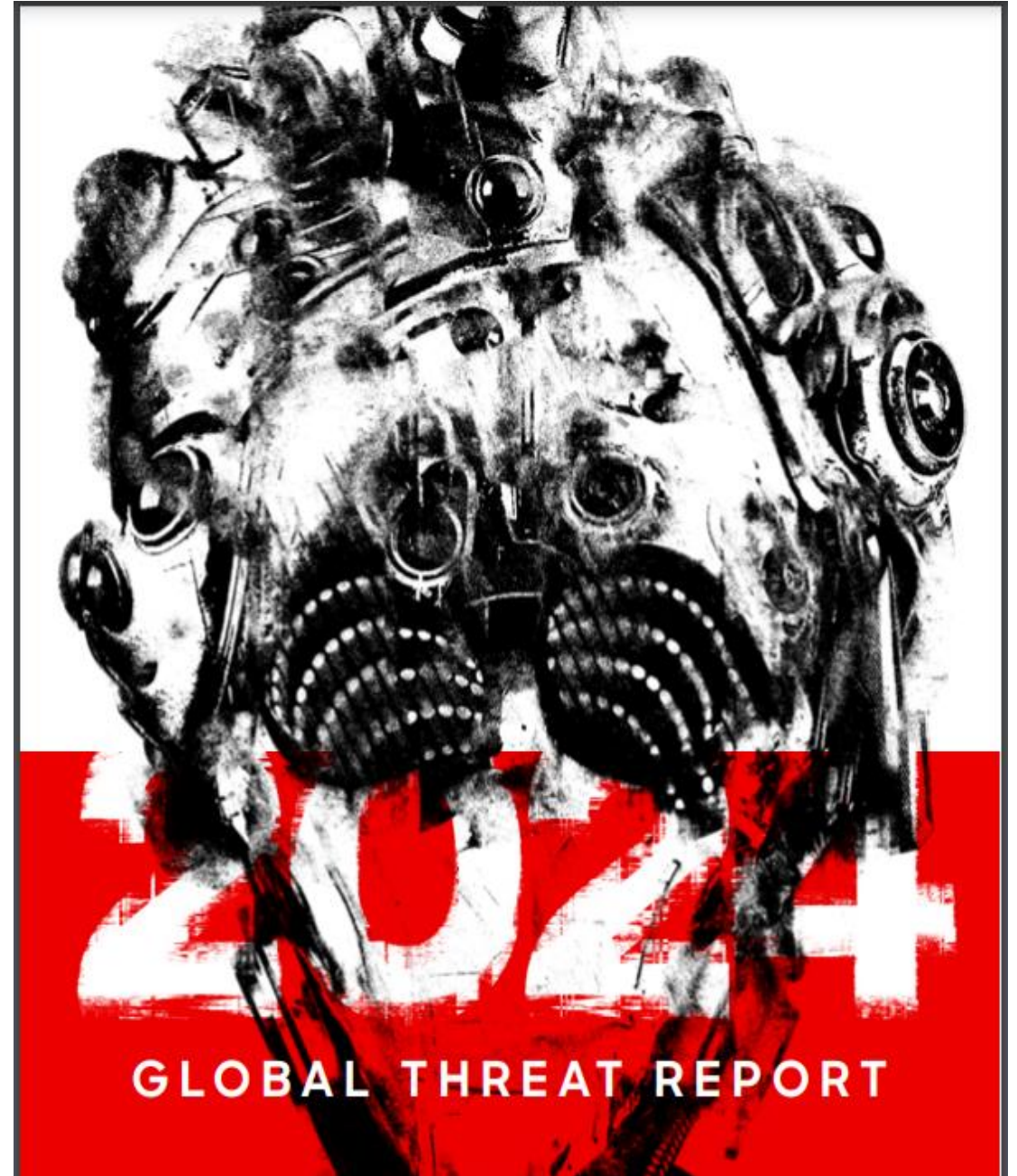
Artificial Intelligence, Machine Learning, Cloud Computing, Data Science and Analytics, and Cybersecurity



Cybersecurity

“The speed and ferocity of cyberattacks continue to accelerate...the rise of generative AI has the potential to lower the barrier of entry for low-skilled adversaries.... driving a tectonic shift in the security landscape and the world”

<https://go.crowdstrike.com/global-threat-report-2024>



“Record-Breaking Gap of 4 Million Cybersecurity Professionals Looms”

- Cyber occupations are projected to generate 474,800 new jobs
- Information Security analyst – fastest growing computer occupation and 5th fastest growing occupation in the economy

<https://www.isc2.org/research>

Bureau of Labor Statistics Monthly Labor Review, October 2023, Industry and Occupational Employment Projections Overview and Highlights 2022-2032.
<https://www.bls.gov/opub/mlr/2023/article/industry-and-occupational-employment-projections-overview-and-highlights-2022-32.htm>



Clean / Renewable Energy

Solar electric power generation, geothermal electric power generation, and wind electric power generation are projected to be the 3rd fastest growing industry in the economy



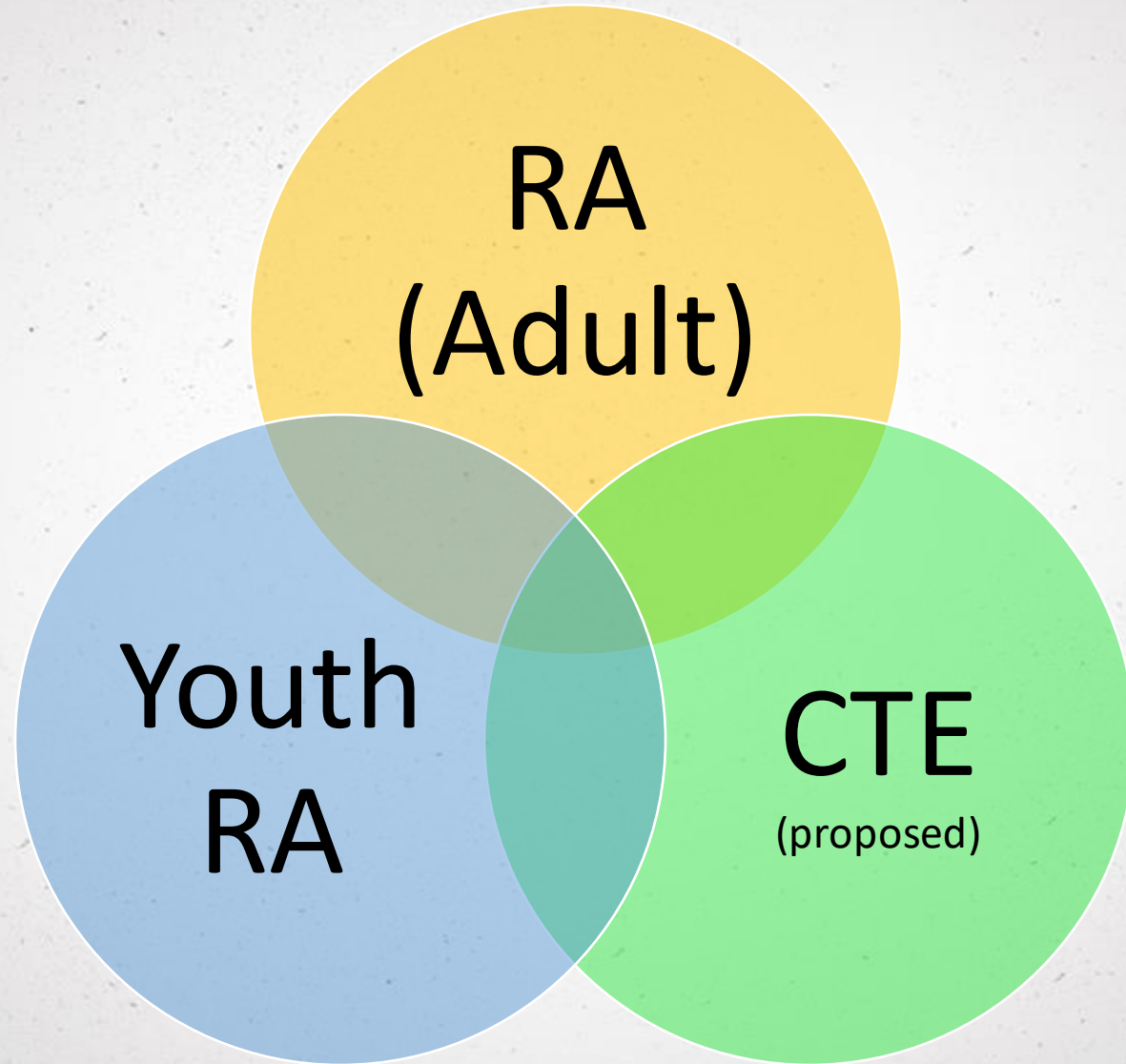
Clean / Renewable Energy

Wind Turbine Technicians are the fastest growing U.S. occupation with an estimated 45% growth rate

Solar photovoltaic installers are among the top 20 fastest growing occupations with a 22% growth rate



Types of Apprenticeship Programs



Youth / CTE Apprenticeship Definitions

- Youth Apprenticeship

- Apprenticeship programs that serve youth, ages 16-24
- Combine technical classroom instruction with paid work experience

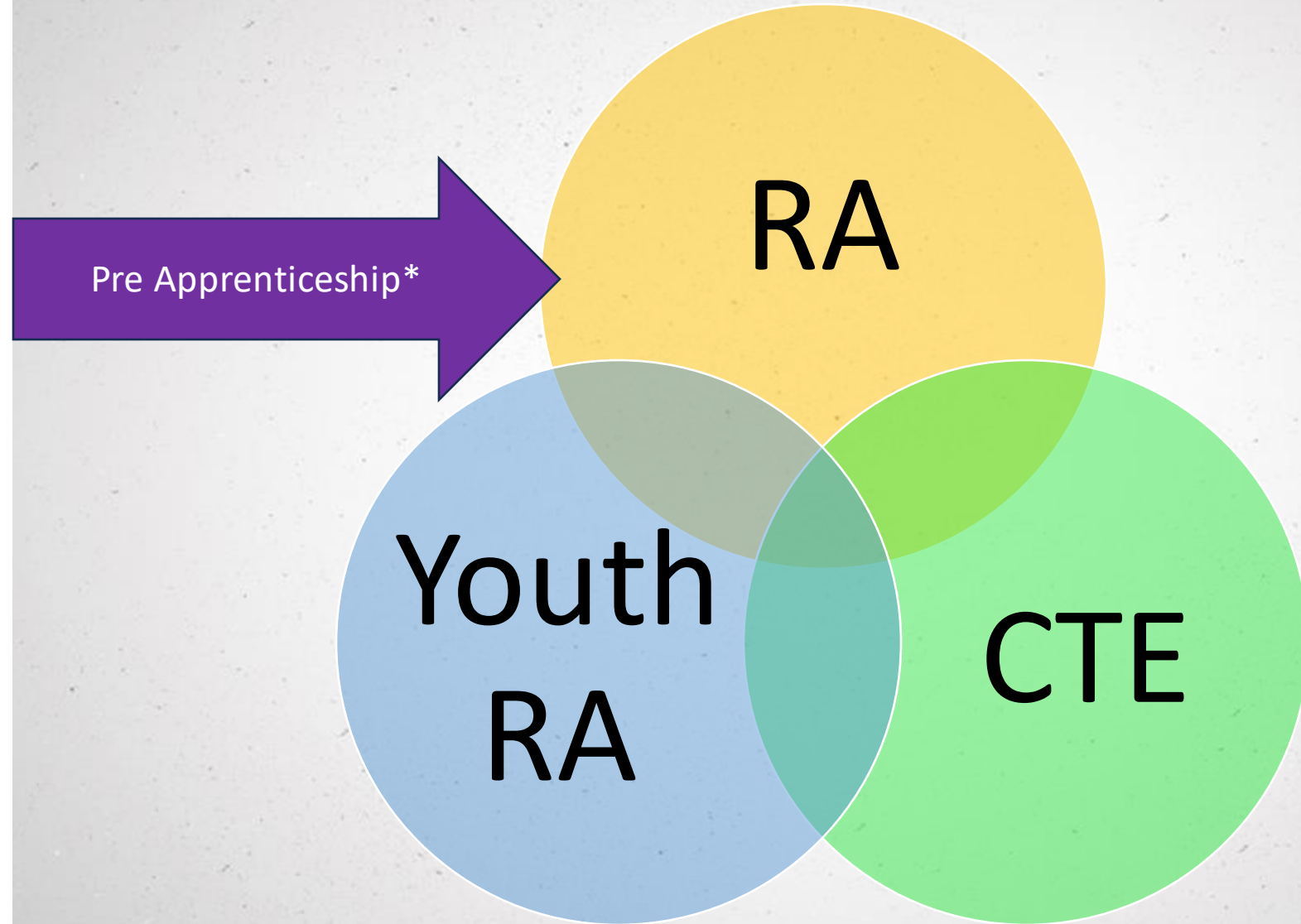
<https://www.apprenticeship.gov/educators/youth-apprenticeship>

- CTE Apprenticeship

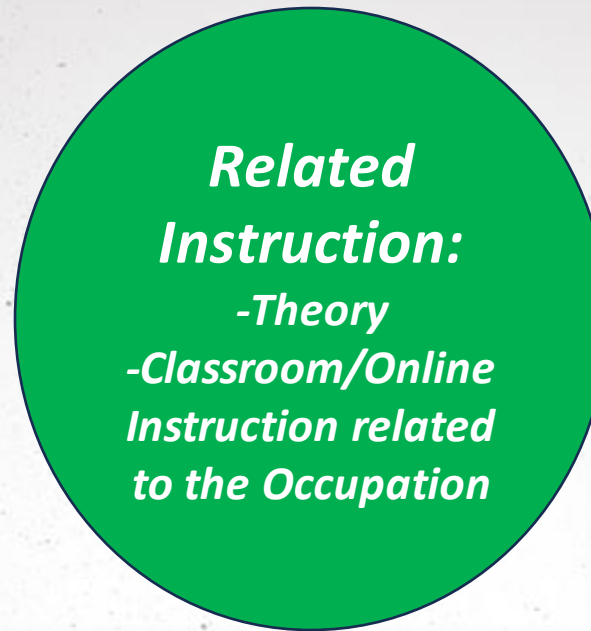
- A new proposed apprenticeship for students >16 enrolled in secondary and post-secondary
- Mandatory coordination with State CTE
- Delivered through Perkins-eligible programs

*USDOL Proposed Rules for Apprenticeship System:
https://apprenticeshipsforamerica.quorum.us/action_center/*

Types of Apprenticeship Programs



Registered Apprenticeship Program - Key Components



Registered Apprenticeship Program - Key Components

Safety
Quality
Diversity, Equity, Inclusion
Accessibility

Related Instruction:

*-Theory
-Classroom/Online
Instruction related
to the Occupation*

On-The-Job Learning:

*-W2 Employment
-Mentor
-Gain
Occupational
Competencies*

*Approved &
Regulated by
OA/SAA*

*National
Credential
issued by
OA/SAA*

Registered Apprenticeship Program Core Roles



Types of RAP Sponsors



Examples of Tech Apprenticeships

Cybersecurity:

- Cybersecurity Support Tech
- Information Security Analysts

IT

- App Developer
- AI-Prompt Engineer
- Video Game Designer

Clean Energy

- Solar Energy Tech
- Wind Turbine Tech

Telecom:

- Tower Technician
- Telecom Line Installer

Andy Smyth

Vice President of Policy, Products and Services, Franklin Apprenticeships

- World Renowned Apprenticeship Expert
- Supported over 10,000 apprentices in 25 tech occupations

Franklin Apprenticeships

- A Multi-Employer Apprenticeship Model
- IBMZ, Help Desk, Network Engineer, Cybersecurity, Software Engineer



franklin
APPRENTICESHIPS

Resources: RA Academy



Welcome to the

Registered Apprenticeship Academy

The academy is designed to cater to all the Registered Apprenticeship program stakeholders playing a vital role in the success of the RA system.

- John V. Ladd, Administrator, Office of Apprenticeship

Resources: Youth / CTE Apprenticeship

- Youth Apprenticeship Evidence
 - Evaluation of DOL funded Youth Grant
 - Report: Youth Apprenticeship in the United States – Apprenticeship Evidence-Building Portfolio
- Evaluation of the American Apprenticeship Initiative
- Youth Apprenticeship Resources
 - School Superintendents Association (AASA) & DOL Video & Toolkit for launching a Youth Apprenticeship Program
 - Advance CTE Report
 - Scholastic Jobs of the Future – “Inside Apprenticeships”
 - Career Development Lessons
 - Soft Skills Activities
 - Remote Learning Guide
 - Apprentice Stories
- National Youth Employment Coalition

<https://www.apprenticeship.gov/educators/youth-apprenticeship>

<https://www.apprenticeship.gov/evaluation-american-apprenticeship-initiative-aa>

1st

Resources: Valley Career & Technical Center Youth Apprenticeship Videos



Links:

Carson: <https://www.youtube.com/watch?v=VaJGiJEz1f0>

Garrett: <https://www.youtube.com/watch?v=qHuoMSwlkHg&t=2s>

Laura & Jake: <https://www.youtube.com/watch?v=fy046O10hQY>

Resources: Youth Tech RA Webinar



Spotlight: Virginia Youth Tech Apprenticeship

				
<p>Bridget Brown Director of Workforce Innovations <i>ICF - Youth Apprenticeship Intermediary</i></p>	<p>Danielle Meyer CTE Workforce Development Coordinator Prince William County Public Schools</p>	<p>Crystal Thrower Registered Apprenticeship High School Work-Based Learning Specialist <i>Virginia SAA</i></p>	<p>Quiana Gainey CEO & Director SecureTech360, LLC Founder, MySecureKid Youth Apprenticeship Program</p>	<p>Chantel Green Youth Director MySecureKid Youth Apprenticeship Program</p>
 				

Link: <https://youtu.be/nFNba15tLI8>



DISCUSSION



Thank You!

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