

The Action Plan for Cyber Diversity

>whoami

- > Lifelong learner
- > Husband
- > Dad
- > Information Security Professional
- > Cyber Education Board Member

The image shows a presentation slide featuring a portrait of Keith Chapman, a Black man with a beard and glasses, smiling. To his left is a circular logo for "BLACKS IN CYBERSECURITY VILLAGE" with a red border and a central shield icon. Below the logo, the text reads "KEITH CHAPMAN" in large red letters, followed by the subtitle "The Action Plan for Cyber Diversity!" in white. At the bottom, it says "Technology in Social Justice" in green, "FRIDAY AUGUST 6, 2021 @ 12:30 PM PDT" in white, and a website link "blacksin cyberconf.com/bic-village". A small skull and crossbones icon is in the bottom right corner.

According to the National Security Agency (NSA), “entry level” for many cybersecurity positions means:

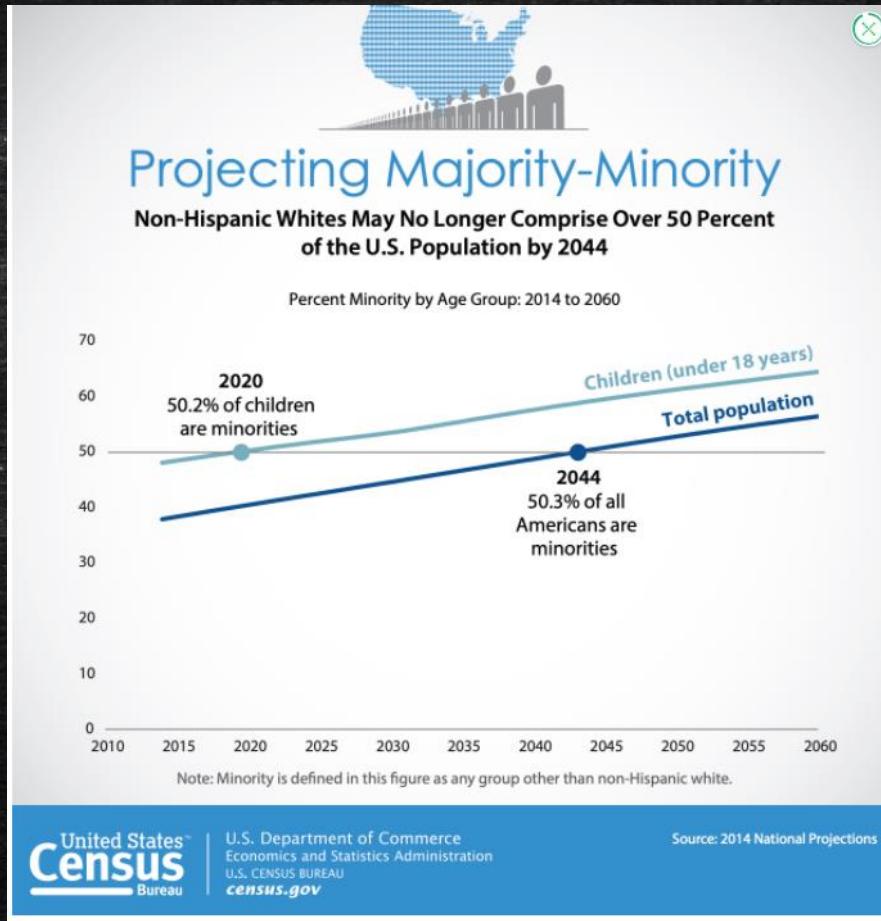
- Bachelor’s degree plus 3 years of relevant experience
- Master’s degree plus 1 year of relevant experience
- Doctoral degree and no experience
- Associate degree plus 5 years of in-depth experience clearly related to the position



What do I mean when I say
“Diversity”?

Diversity : composed of varied elements

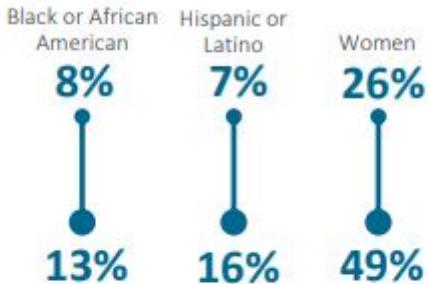




U.S. Diversity is reaching critical mass. [This is Happening!](#)
<https://www.census.gov/content/dam/Census/library/publications/2015/demo/p25-1143.pdf>

TECH WORKFORCE CHARACTERISTICS²

U.S. tech occupation representation



vs. representation across all U.S. occupations

EXAMPLES OF TECH JOB REPRESENTATION VS. ALL JOBS IN STATE REPRESENTATION²

BLACK OR AFRICAN AMERICAN REPRESENTATION

	Tech Jobs	All Jobs
District of Columbia	29%	34%
Mississippi	25%	38%
Georgia	23%	32%
Maryland	20%	27%

CompTIA Cyberstates 2021



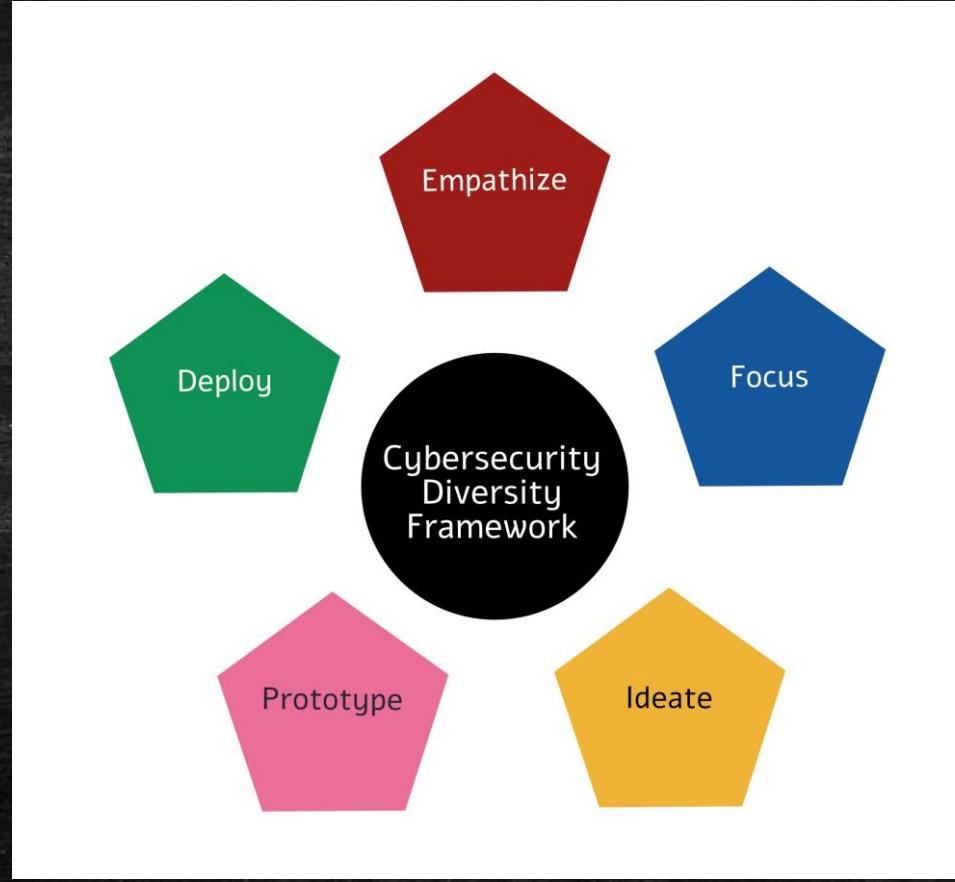
Why Diversity?

- Public Image
- Drive innovation
- Increase profitability
- Be more secure

What does this have to do with
~~haxors?~~
~~H4x0rs?~~
~~Haxx0rs?~~
hackers?



The Action Plan!



Cybersecurity Diversity Framework



Empathize

Empathize and discover patterns of behavior.

What do they need?



Focus

Focus your objective.

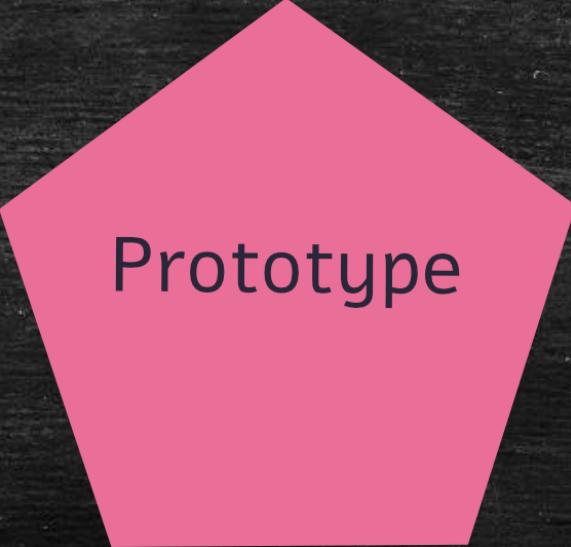
How can I help?



Ideate

Ideate and design solutions.

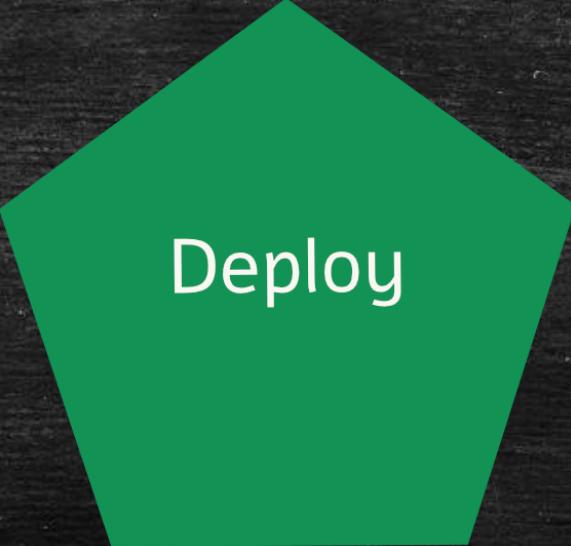
What does change Look Like?



Prototype

Prototype and assess together.

How does my thinking need to transform?



Deploy

Deploy the best model.

What works? What doesn't work?

If you are entry-level/aspiring cyber-professional

- Network on social media/Ask questions.
 - LinkedIn
 - Discord
 - Twitter
- Research security career paths and make a study plan.
- Attend MeetUps, Conferences, Webinars.
- Apply for targeted jobs.

If you are a parent

- Attend a BSides with them (Virtually or locally).
 - <http://www.securitybsides.com/w/page/12194156/FrontPage>
- Invest in a Raspberry Pi and start a cyber Pi project.
 - <https://www.cyberpiprojects.com/>
- Join a Makerspace as a family.
- Find student groups.
- Share career possibilities.
 - <https://www.comptia.org/content/it-careers-path-roadmap>
- Deploy and secure Internet of Things devices in your home
 - Smart bulbs, video doorbells, smart speakers, thermostats, etc.
- Start a project in the cloud.
 - <https://www.upgrad.com/blog/aws-projects-ideas/>



If you are an educator

- Help students to align with the NICE Workforce Framework
 - <https://niccs.cisa.gov/workforce-development/cyber-security-workforce-framework>
- Invite STEM professionals to speak/workshop
- Partner with existing organizations
 - <https://cin.comptia.org/>
 - <https://www.raspberrypi.org/teach/>
 - <https://teachcomputing.org/>
 - <https://isaaccomputerscience.org/>
 - <https://codeclub.org/en/start-a-code-club>
 - This is for children aged 9-13 and doesn't require that you have coding knowledge.



If you know a student

- Direct them to curated resources
 - <https://freetraining.dfirdiva.com/free-training-for-kids>
 - <https://www.raspberrypi.org/>
- Encourage them to participate in a Capture The Flag (CTF) competition
 - <https://ctf101.org/>
 - <https://www.picoctf.org/>

If you are an medium/large employer

- Create true entry-level opportunities.
- Cross train help desk employees with the system administrators, network administrators and information security professionals.
- Understand that tech skills can be taught and look for the intangibles that are indicators of potential success when interviewing.



If you own a small business/nonprofit

- Protect your business with best practices and consider the techy people in your life
- <https://www.itondemand.com/2021/02/11/best-security-practices-small-business/>

If you just want to help

- Volunteer at a conference.
- Review a resume.
- Answer questions.
- Support existing efforts.
- Remember what it was like to get started.
- Share your journey/skills.



U.S. has almost 500,000 job openings in cybersecurity

([CBS News](#))

In a study entitled “Tech leavers” by the Kapor Center for Social Impact...found that 40% of Black, Hispanic and Native American men left their jobs due to unfairness and racism in the workplace.

Kapor Center for Social Impact, Tech leavers: <http://www.kaporcenter.org/tech-leavers>

How can we make it better?

- Mentoring
- Build inclusive culture
- Professional Development



What if we collaborated?

- Technology Innovation Incubators
- Cross-Industry Partnerships
- Cyber-Talent Pipelines



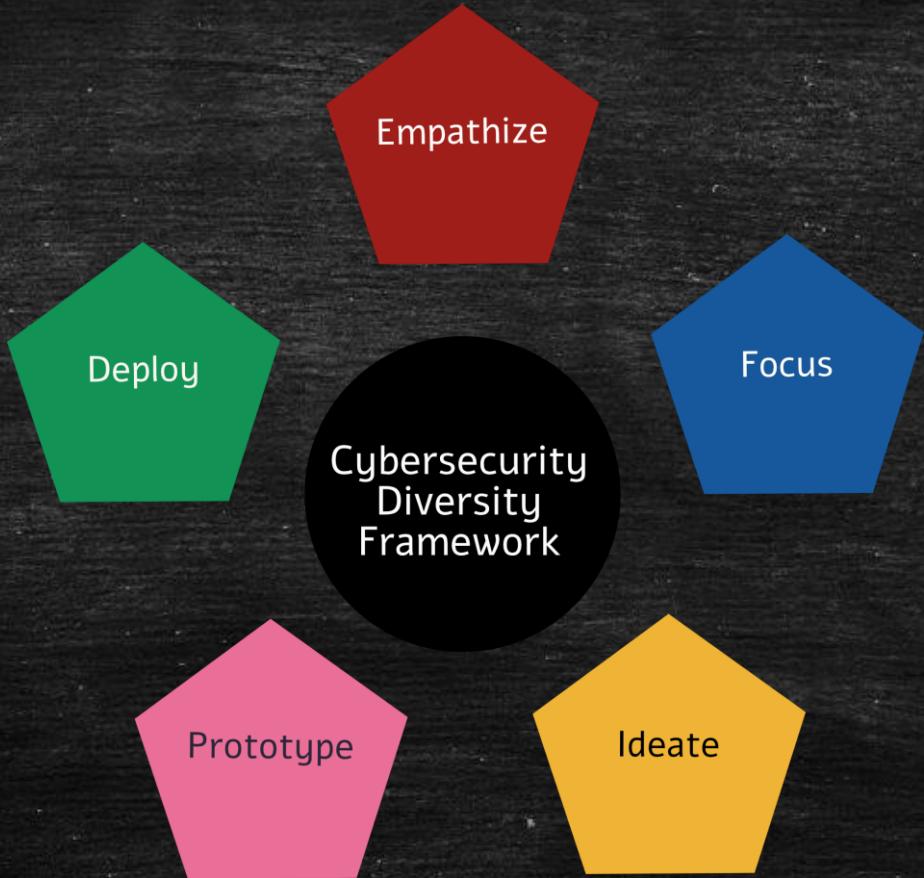
What If we could create true entry level cyber positions?

- Apprenticeship
 - Scalable Positions
 - Mentoring



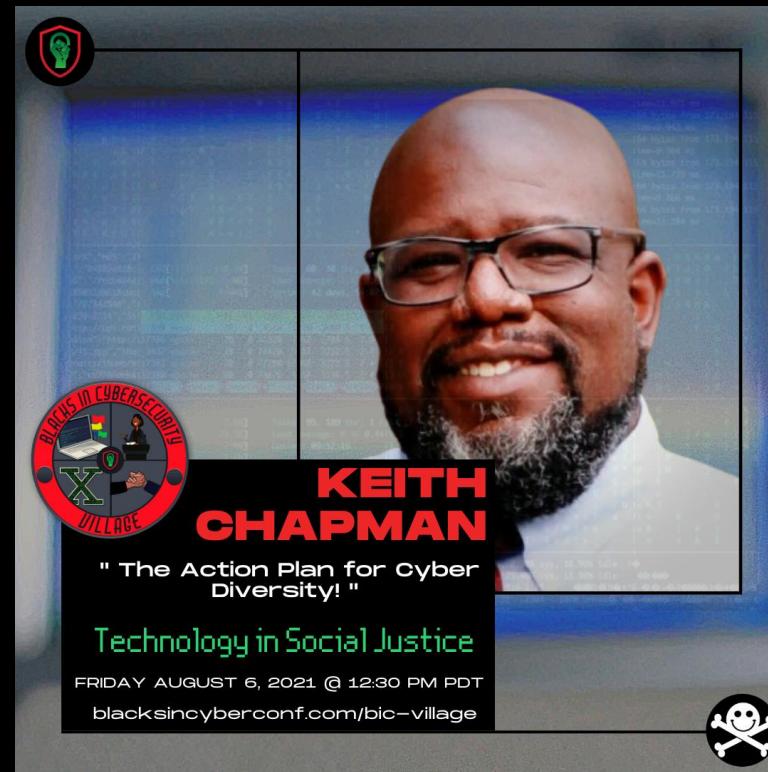
What If we could start STEAM/STEM with younger students?

-
- Junior High
 - Elementary
 - Younger?



- There are many diverse candidates that can succeed and flourish in this field.
- Diverse companies are stronger.
- We all benefit.

KEITH CHAPMAN



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- <https://www.github.com/s1lv3rl10n>

LOCATION: BIC VILLAGE