

The Action Plan for Cyber Diversity

>whoami

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



A promotional graphic for Keith Chapman. It features a portrait of a smiling Black man with glasses and a beard, wearing a white shirt. The background is a blurred image of a computer screen displaying code. In the top left corner, there is a small circular logo with a green silhouette of a person's head. In the bottom left corner, there is a circular logo with the text "BLACKS IN CYBERSECURITY" and "VILLAGE" around a central graphic. Below the portrait, the name "KEITH CHAPMAN" is written in large, bold, red letters. Underneath the name, the quote "The Action Plan for Cyber Diversity!" is written in white. Below the quote, the text "Technology in Social Justice" is written in green. At the bottom, the date and time "FRIDAY AUGUST 6, 2021 @ 12:30 PM PDT" and the website "blacksincyberconf.com/bic-village" are listed in white. In the bottom right corner, there is a small circular logo with a white skull and crossbones on a black background.

KEITH CHAPMAN

" The Action Plan for Cyber Diversity! "

Technology in Social Justice

FRIDAY AUGUST 6, 2021 @ 12:30 PM PDT

blacksincyberconf.com/bic-village

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

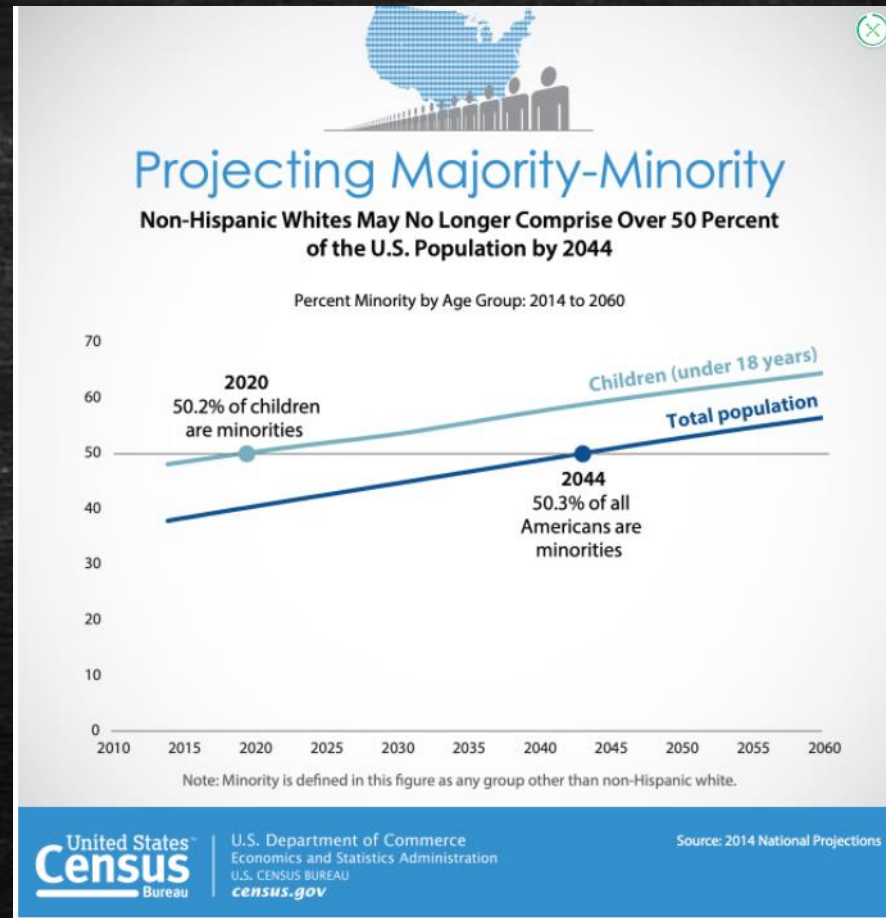
- Bachelor's degree plus 3 years of relevant experience
- Master's degree plus 1 year of relevant experience
- Doctoral degree and no experience
- Associate degree plus 5 years of in-depth experience clearly related to the position



What do I mean when I say
“Diversity”?

Diversity : composed of varied elements

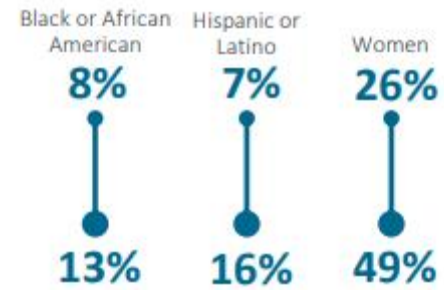




U.S. Diversity is reaching critical mass.
[This is Happening!](https://www.census.gov/content/dam/Census/library/publications/2015/demo/p25-1143.pdf)
<https://www.census.gov/content/dam/Census/library/publications/2015/demo/p25-1143.pdf>

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?~~
~~H4xors?~~
~~Haxx0rs?~~
hackers?

大事なことは
THE MOST IMPORTANT THINGS

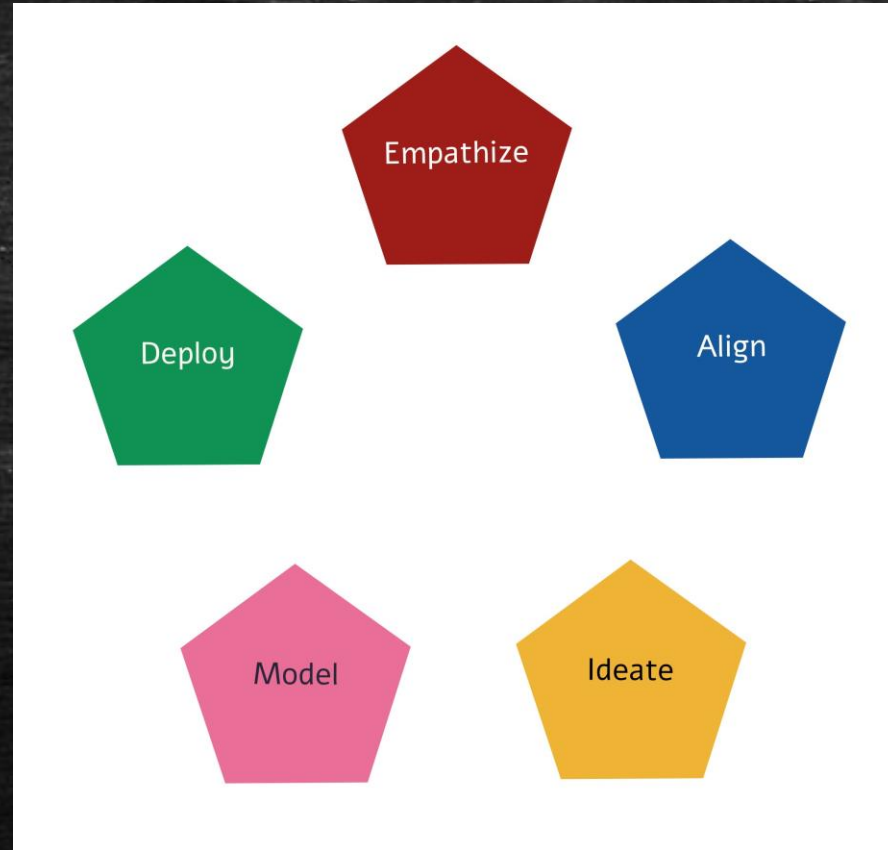
特撮10
トクサツガガガ

総合 1/18(金) 夜10時
スタート

ARE TAUGHT BY TOKUSATSU!

特撮が教えてくれる!

The Action Plan!



Cybersecurity Diversity Framework



Empathize

Empathize and discover patterns of behavior.

What do they need?



Align

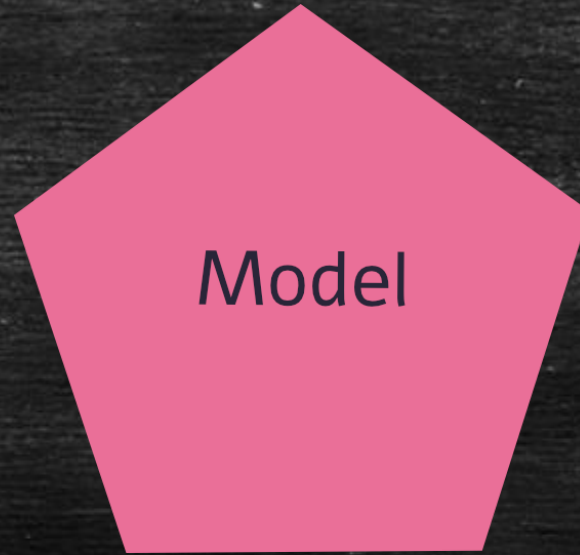
Align your objective.

How can I help?



Ideate and design solutions.

What does change look like?



Model and assess together.

How does my thinking need to transform?



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://isaacomputerscience.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.



A global network of free coding clubs for 9–13 year olds

Start a club > Volunteer >
Information for parents

13,000 active Code Clubs around the world

160 countries, from Brazil to Bangladesh

180,000 young people learning to code each week

How Code Club works

Enthusiastic people Give one hour a week + Local school Offers space and equipment + Free resources Projects and support from Code Club = Kids in your community learn to code

The infographic illustrates the Code Club model. It shows a sequence of steps: 1. Enthusiastic people (represented by a superhero icon) who give one hour a week. 2. A local school (represented by a schoolhouse icon) that offers space and equipment. 3. Free resources (represented by a laptop icon with a rainbow) including projects and support from Code Club. These three components are combined (indicated by plus signs) to result in 4. Kids in your community learning to code (represented by two children holding a 'code club' sign). The top section of the infographic features a group of diverse children and young people, some holding a 'code club' sign, against a green background with the text 'A global network of free coding clubs for 9–13 year olds'. Below this, there are three green boxes with white text: '13,000 active Code Clubs around the world', '160 countries, from Brazil to Bangladesh', and '180,000 young people learning to code each week'. Navigation links 'Start a club >' and 'Volunteer >' are present, along with a link for 'Information for parents'.

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



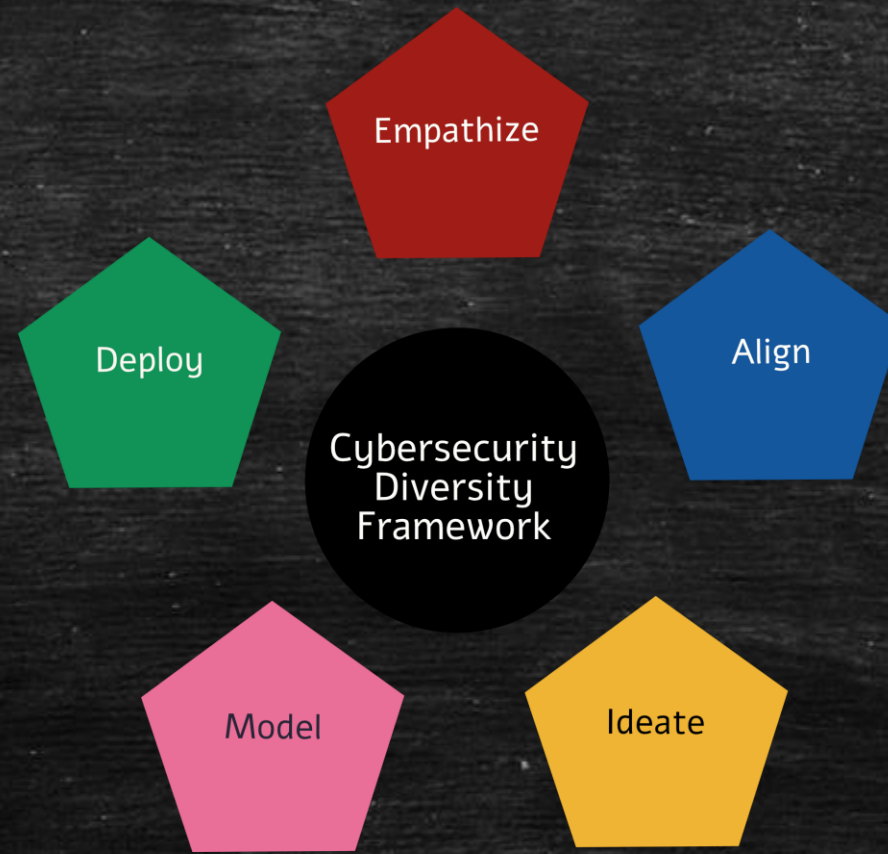
What If we could create true entry level cyber positions?

- Apprenticeship
- Scalable Positions
- Mentoring



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

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- Junior High
 - Elementary
 - Younger?



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- 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.linkedin.com/in/keithrchapman>
- <https://www.github.com/s1lv3r110n>



LOCATION: BIC VILLAGE