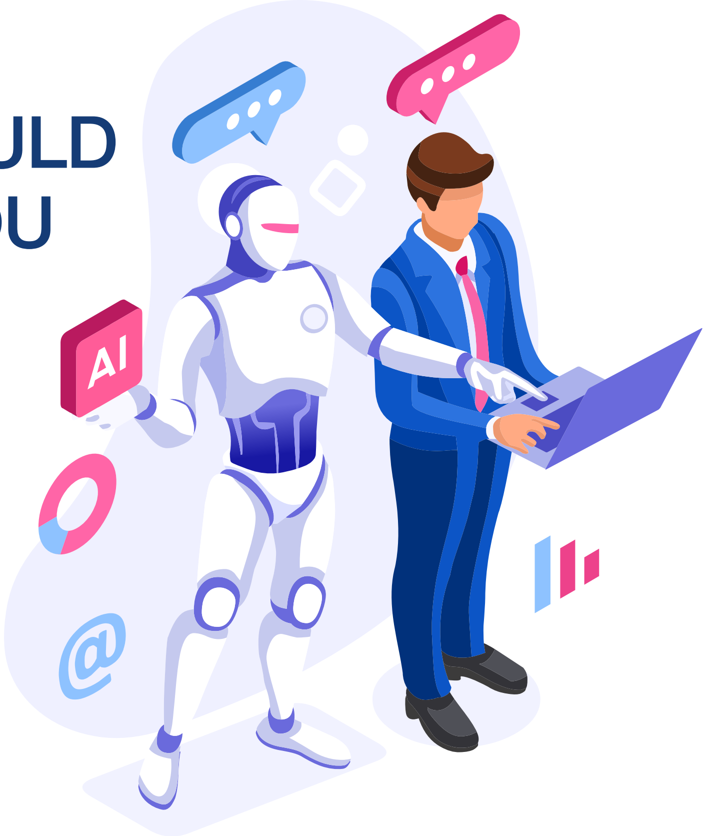
ClearanceJobs®

BAE SYSTEMS

AISecOps

THE TREND THAT COULD CHANGE THE WAY YOU HIRE FOR CYBER

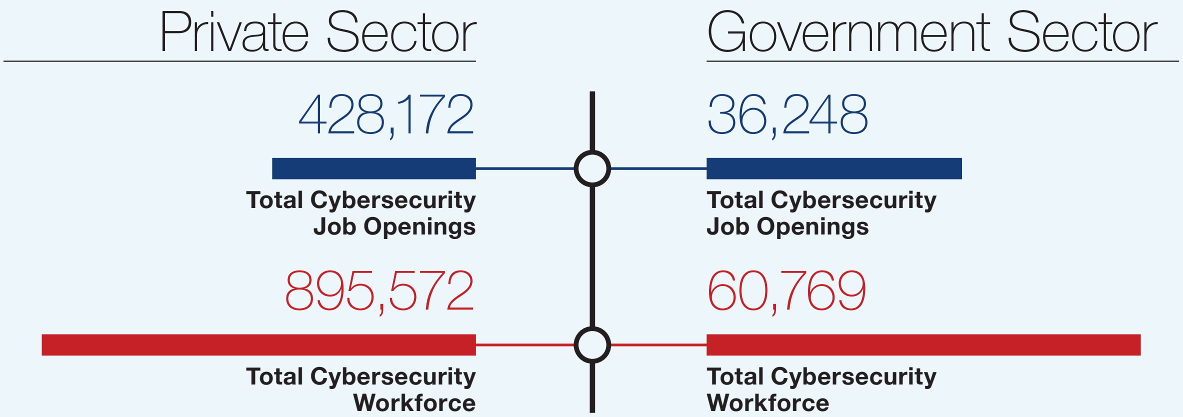
Cyber threats continue to expand faster than both government and industry can find the professionals to combat them. Demand for cyber talent is skyrocketing and the defense industry's embrace of hybrid work environments just creates new security vulnerabilities. Name the nation state—Russia, China, and North Korea, specifically—and they are running targeted attacks on U.S. cyber and critical infrastructure daily. The Internet of Things makes everything vulnerable and means the world of cyber increasingly touches everything.



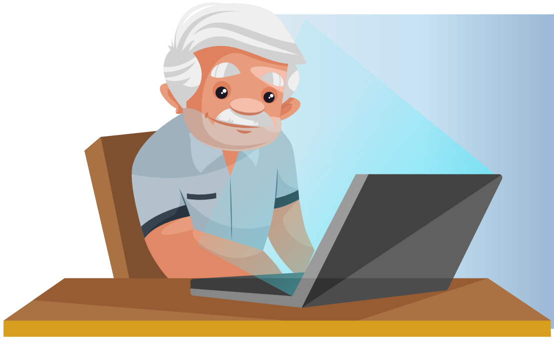
The (Shrinking) Cyber Workforce

The government knows it has a talent issue, but it often seems hard pressed to solve it. During a recent House Homeland Security Committee Hearing, Max Stier, head of the Partnership for Public Service, noted how cyber positions with some federal agencies have fallen over the past five years. Another critical issue is the graying of the federal cyber workforce: there are 16 times more federal IT workers over 50 than younger than 30.

The cyber threats are rising, and the cyber trends are continually changing. One trend is far from new, but the way it's being applied to security operations could help protect U.S. infrastructure and change the way the defense industry arms its Security Operations Center (SOC).



	Private Sector	Government Sector
Total Cybersecurity Job Openings	428,172	36,248
Total Cybersecurity Workforce	895,572	60,769



> "There are **16 times** more federal IT workers over the age of 50 than younger than the age of 30."

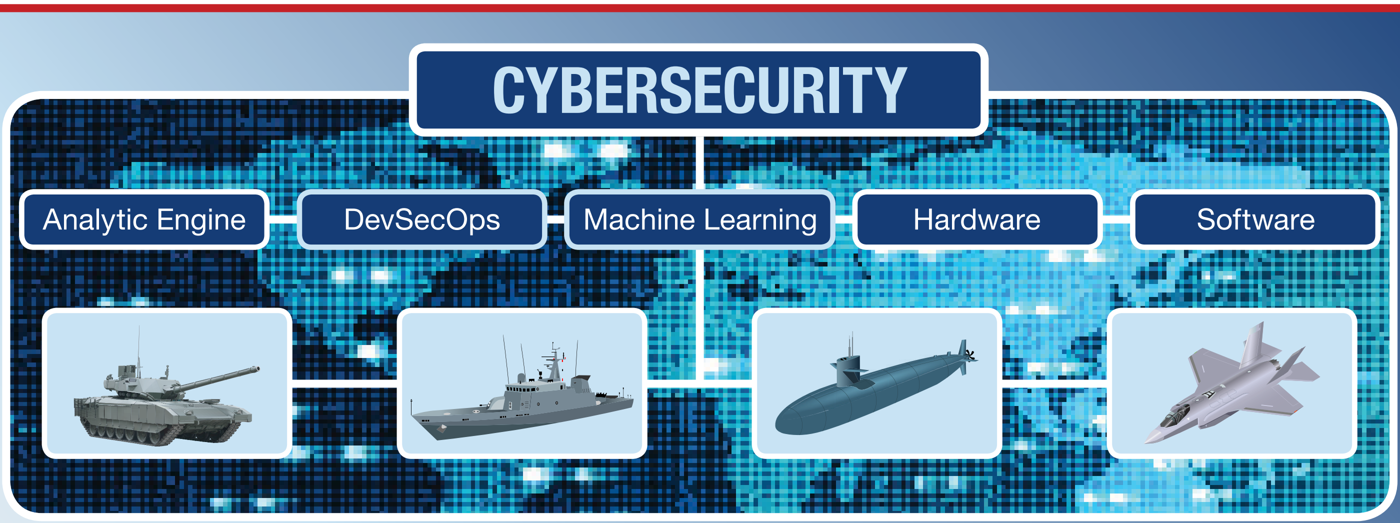
AI Applied to Security Operations (AISecOps)

Long before Terminator made us all wonder if we wanted machines to be decision-makers, “father of computer science” Alan Turing was asking if machines could think. Far from a new term, what has exploded in recent years has been the numerous ways AI can be applied, including the field of AISecOps, which is taking the best of automation and using it to overhaul today’s security environment.

“As cyber threats continue to grow in both number and capability, we are counterpunching with developing and deploying AI into our security operations,” said Peder Jungck, Vice President and Chief Technology Officer, BAE Systems. “AISecOps is a powerful force multiplier for organizations and efforts in combating cybercrime.”

AISecOps takes many of the most emerging terms in cyber today—Machine Learning, DevSecOps, Computer Vision, Robotic Process Automation—and bakes them into creating solutions that leverage the best of what talent and tech have to offer.

“We’re trying to have the machine enhance what the operator is doing,” said Kyle Draisey, Senior Solutions Architect at BAE Systems, who likens AISecOps to a fighter pilot in the cockpit working with a targeting system. The computer system within the fighter jet enables the fighter pilot to use a machine gun while flying at Mach 2.



5 Cyber Trends You Want to Know

1. **Artificial Intelligence**
   Leveraging computers and machines to make decisions.
2. **Machine Learning**
   A branch of artificial intelligence that uses automated analytical modeling.
3. **DevSecOps**
   Development, Security, and Operations—the process of baking security into the full development lifecycle.
4. **Computer Vision**
   A field of artificial intelligence that derives meaning from images including video.
5. **Robotic Process Automation**
   Software programmed to accomplish repetitive tasks.

Ethical AI is a force multiplier across the IC, helping human decision makers make decisions faster. The National Security Commission on Artificial Intelligence released a report this year calling on the U.S. to be cyber ready by 2025.

“By 2025, the foundations for widespread integration of AI across DoD must be in place,” the report noted. “Those foundations include a common digital infrastructure that is accessible to internal AI development teams and critical industry partners alike, a digitally literate workforce, and modern AI-enabled business practices that improve efficiency.” The focus of NSCAI is to safely and quickly implementing AI across defense. One of the biggest concerns in many sectors is the affect on jobs and workers.

“…the biggest harm that AI is likely to do to individuals in the short term is job displacement, as the amount of work we can automate with AI is vastly larger than before,” said Eric Schmidt, chairman of NSCAI.

But given the ongoing shortage of talent in tech—particularly cleared cyber professionals—AI has a dramatic opportunity to enhance and improve the current workforce. AISecOps allows Tier 1 security operators to be enhanced with AI, opening the doors for more professionals to tackle the higher tiers of security threats.

“We leverage machine learning to play into known threats that you know you’re going to experience on your network,” said Draisey. Phishing attacks remain one of the key ways adversaries gain access to secure networks—including the 2016 OPM data breach. They’re also one area where AI can readily aid security teams, identifying anomalies and alerting employees to potential threats.

AI—if employed effectively—could be a game changer for defense industry recruiting and hiring. “Do you want to be working on the coolest, latest and greatest stuff, or do you want to be sitting back on tried and true things?” said Draisey. AI empowers security teams with the most cutting-edge technology and can also aid in retention and internal mobility.

“Leveraging AI we can take the yeoman’s work of security operations and use machine learning processes to handle known threats,” said Draisey. “We use AI to augment the security analyst, using things like computer vision and natural language processing, and leveraging those tasks that aren't necessarily security-focused."

If your security team isn't currently leveraging AI to identify solutions, the time is likely on the horizon. With more threats rolling in than humans have the eyeballs to catch them, AI can sift the risks, and humans can remediate them. The benefits to companies are obvious—quicker threat detection—but the benefit to the security workforce is potentially more significant. Candidates today are attracted to the mission and career advancement, and AISecOps enable both. Companies who want to compete for security talent will provide them tools that enable and empower—and highlight those tools in the hiring process.

AI doesn't replace the need for qualified security professionals, but enhances the existing workforce. The problem of maintaining security and SCIF demands is only growing, particularly as companies begin to implement the Cybersecurity Maturity Model Certification (CMMC). The interim rule went into effect in November of 2020, and by 2026 is expected to be baked into all defense contracts. For requests for proposals with CMMC requirements, compliance is required in order to bid on the contract. Cybersecurity isn't an option—it's essential. Smart companies are looking today at how they can apply AISecOps to make their security officers more efficient.

ClearanceJobs

A modern marketplace for career opportunities
in national security

ClearanceJobs is your all-in-one recruiting solution. Much like a CRM, our unique system lets you work candidate leads through a funnel, converting cool passives to active candidates ready to make a move—to your company.

STRUGGLING TO HIRE? TRY SOURCING SERVICES

ClearanceJobs Sourcing Services matches you with a dedicated recruiting team that actively sources engaged cleared candidates, reviews their skills, and performs phone screens—all in a cost-efficient way, so you can make the best hires within your budget.

CLEARANCEJOBS CAREER EVENTS

Our career events are turnkey—scheduled, organized, and advertised to deliver prime cleared candidates for your in-person and virtual. Simply show up! With over 30 career fairs held each year throughout the country, ClearanceJobs Career Events is the leading producer of career fairs catering to security-cleared professionals.

Want to learn more?
Connect with a ClearanceJobs Recruiting
Specialist today at **1.866.302.7264**
or visit our website at www.clearancejobs.com

ClearanceJobs®