



Cybersecurity

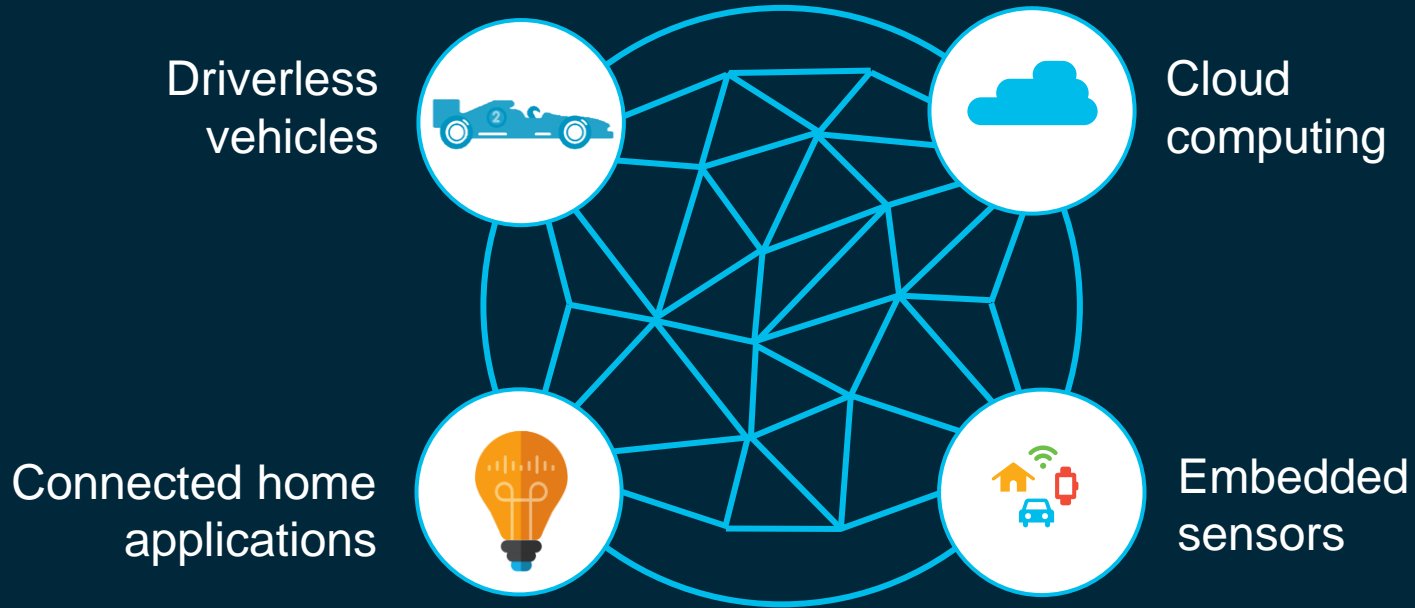
The War and the Defenders

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Director, Institute of Continuing Education
American International University-Bangladesh

The world is changing fast.
It needs protection.

With Everything Getting **Connected** the Threat Landscape is Rapidly Changing



By 2023, global Internet connections will rapidly increase



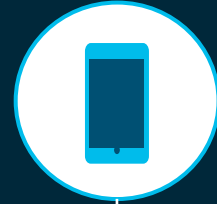
48%

Home
application
connections



30%

Car applications



5.7
Billion

Mobile
subscribers

and as a result, will increase the attack surface

Every 39 seconds,
there's a hacker attack

Top Concern for Government/Private Sector



Cybercrime damage predicted to hit \$10 trillion annually by 2025



Cybersecurity spending to exceed \$1 trillion from 2017-2021



Ransomware damage is predicted to grow more than 57X from 2015-2021



70% of cryptocurrency transactions will be for illegal activity by end of 2021

Security is #1 Concern for CEOs – Here's Why



Sophistication, stealth, and frequency of threats will continue to increase



58 days median time from internal data breach to discovery ²



186 days median time from external breach to discovery ²



\$3.92M average cost of a breach ³

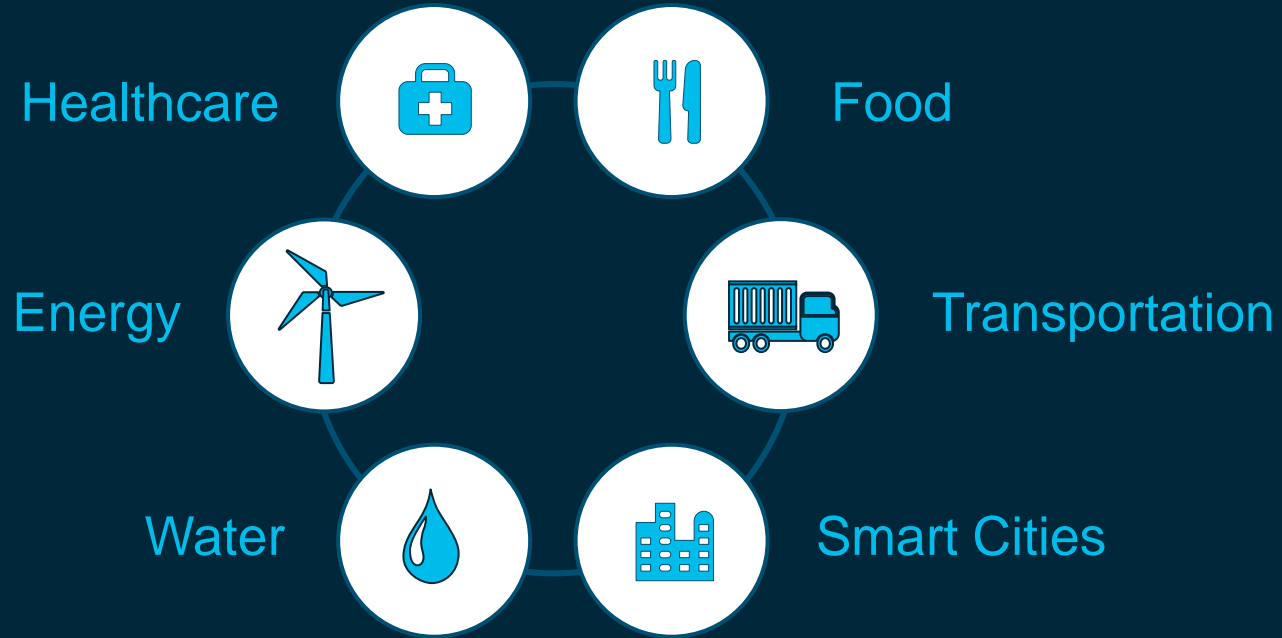
2. Source: Mandiant M – Trend Report, 2018

3. Source: Ponemon Institute: Cost of a Data Breach Study, 2019

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- More than 25 percent of cyberattacks in healthcare delivery organizations involved the Internet of Things (IoT). To be clear, in medical terms, that means wirelessly connected and digitally monitored implantable medical devices (IMDs) — such as cardioverter defibrillators (ICD), pacemakers, deep brain neurostimulators, insulin pumps and ear tubes
- Ransomware attacks on healthcare organizations are predicted to grow to 5X by 2025, according to Cybersecurity Ventures

Impacting all Industries



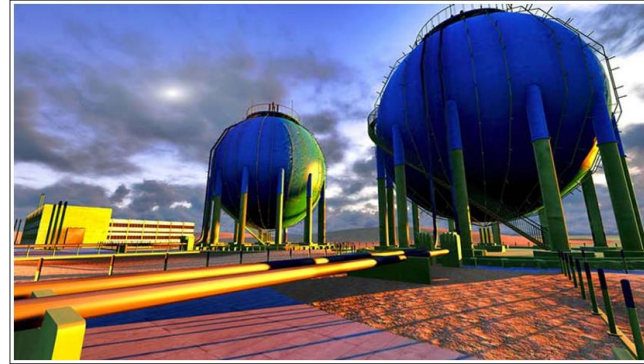
War Stories



**Hijacked
People**



**Ransomed
Organizations**



**Targeted
Nations**

Hackers stole half a billion
personal records in 2018

Who are behind these Cyber Threats?



Insider



Hacktivists



Criminal organisations



State-sponsored efforts

The world needs skilled workforce to
fight in the war against cybercrime

Widening the skills gap

3.5
million



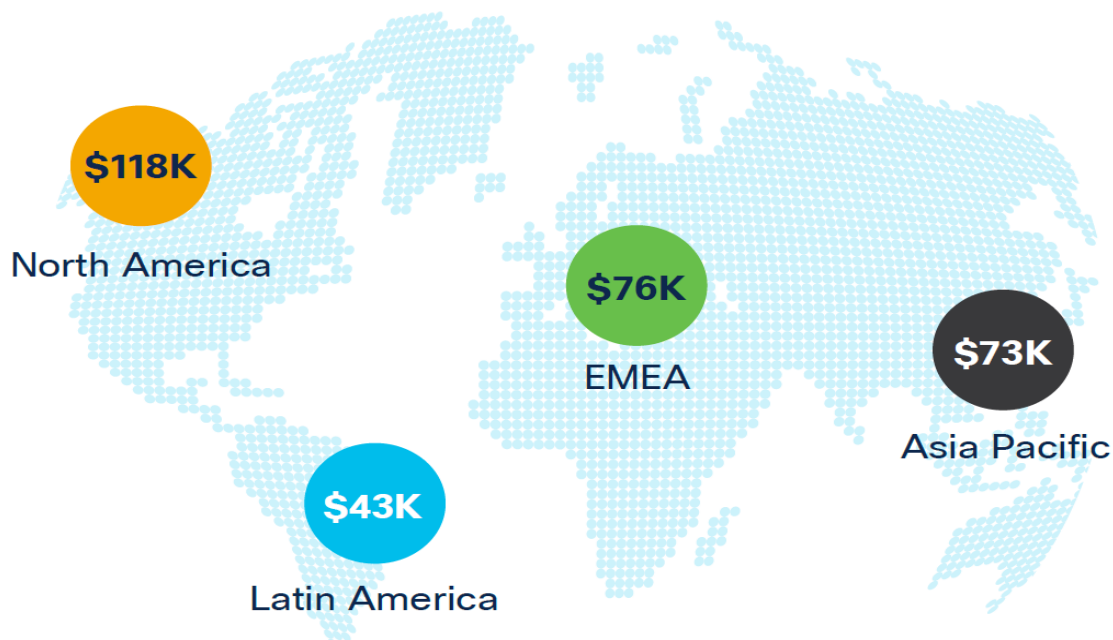
By end of 2023, the global cybersecurity workforce shortage has been projected to reach more than 3.5 million

Workforce Gap by Region



Source: multiple sources & time frames

Cybersecurity Salary Map



Average Cybersecurity Salaries

According to a recent survey of IT decision makers by the Centre for Strategic and International Studies



82%

A donut chart with a light blue outline and a darker blue fill, representing 82% of the total. The percentage '82%' is displayed in white text in the center of the chart.

Say they have a shortage of
cybersecurity skills



71%

A donut chart with a light blue outline and a darker blue fill, representing 71% of the total. The percentage '71%' is displayed in white text in the center of the chart.

Say it causes direct and measurable
damage to their organization

Cybersecurity Employment Opportunities



3X

Jobs are growing **3x faster** than
IT jobs in general

84%

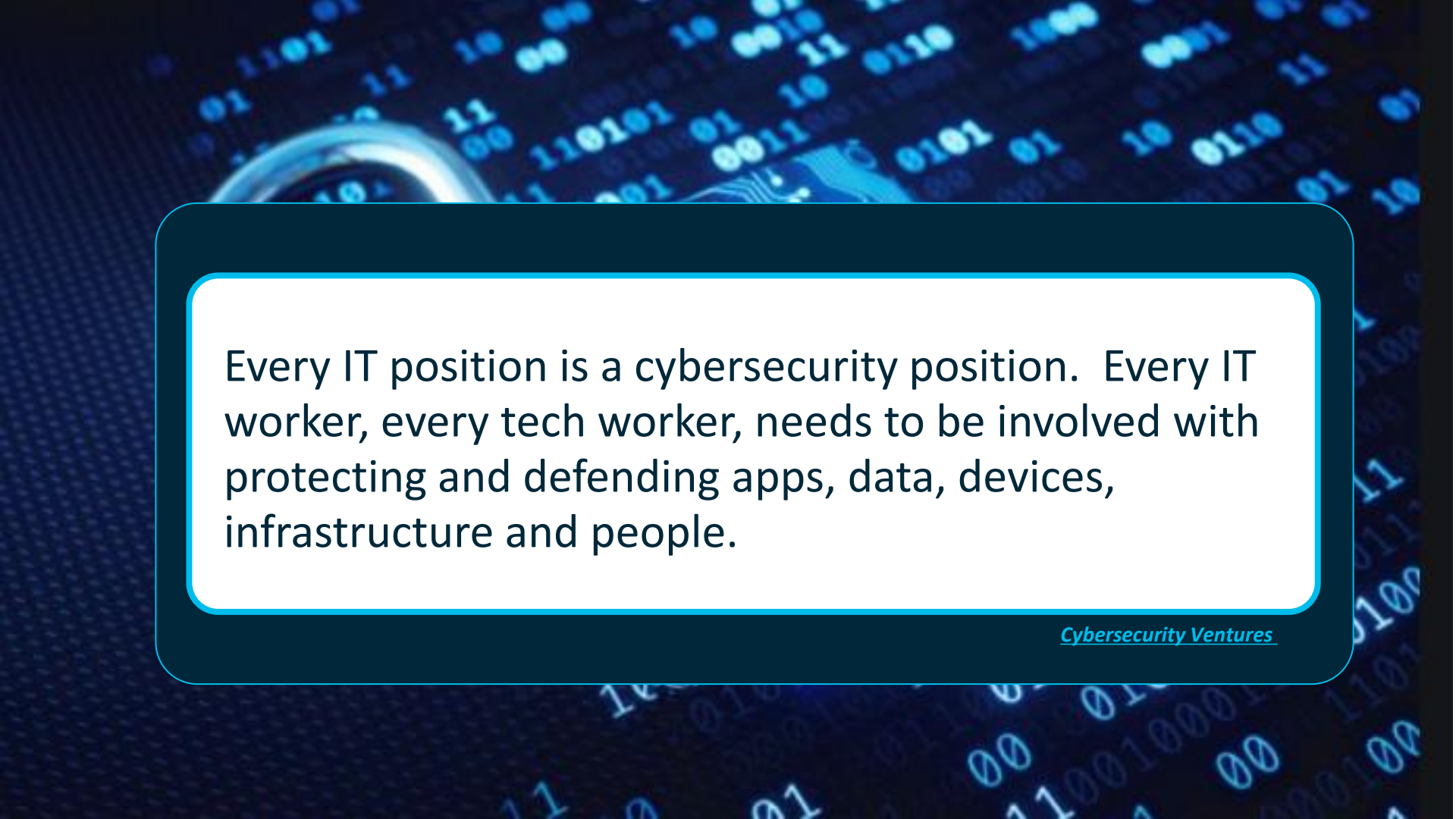
84% of organizations believe that **50% or fewer** are qualified

6M

Global shortage of **6 million** professionals
expected by 2025

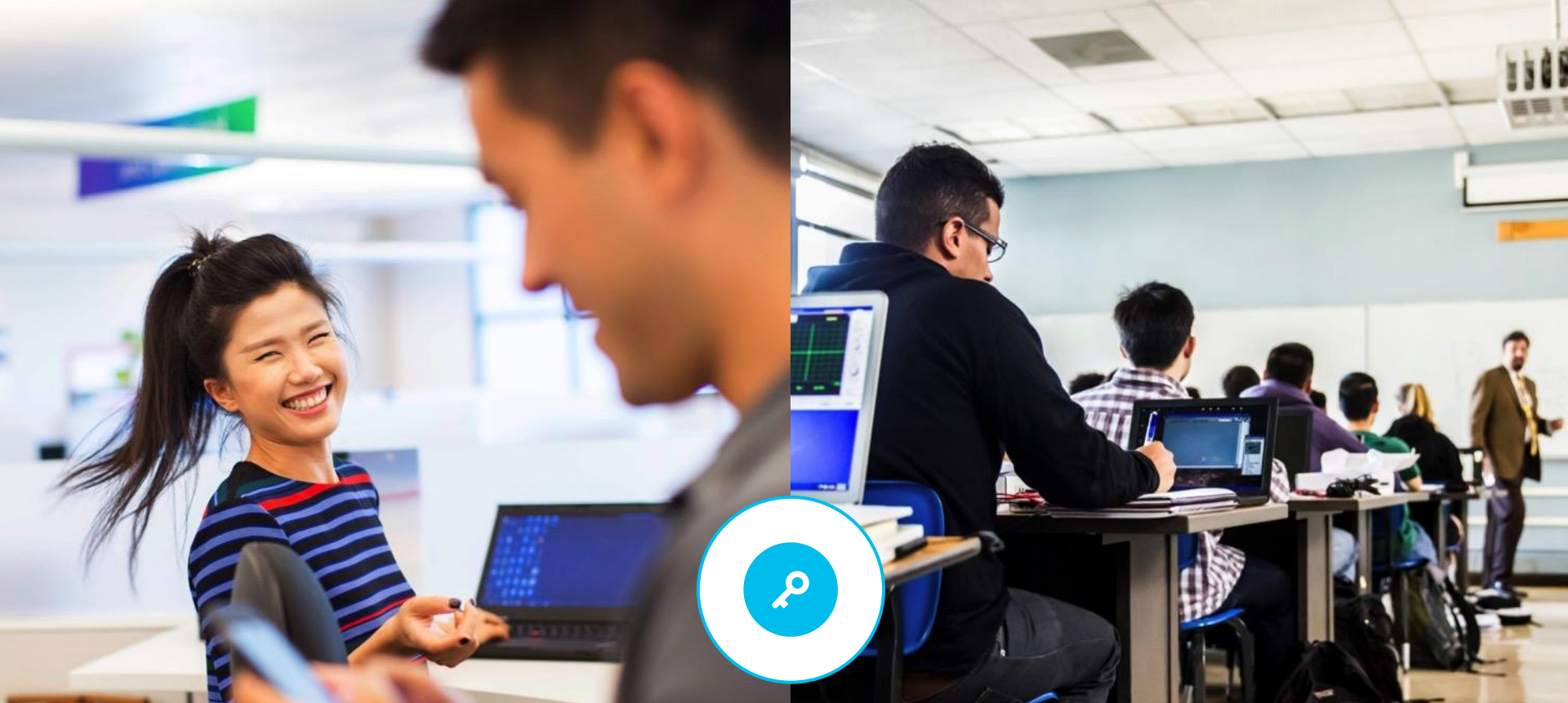
Cybersecurity Job Opportunities in Bangladesh

According to Cyber Maturity Survey by NCERT Bangladesh, the job market for information security analysts will grow by 72% by 2024, which makes it one of the fastest growing job fields.

The background of the slide is a dark blue field filled with glowing binary code (0s and 1s) in a lighter blue color. A magnifying glass with a silver rim is positioned in the upper left quadrant, its lens focused on the binary digits. The text is contained within a white rounded rectangle with a blue border.

Every IT position is a cybersecurity position. Every IT worker, every tech worker, needs to be involved with protecting and defending apps, data, devices, infrastructure and people.

[Cybersecurity Ventures](#)



Education and training is key





Networking
Academy

Cybersecurity is a top concern for governments and organizations around the world. Recognizing this problem, Cisco believes it is critical for organizations to develop knowledge and capacity in this area. We can help provide training and skills on through our Cisco Networking Academy program.

Cybersecurity Pathway

Cybersecurity professionals who can protect and defend an organization's network are in high-demand. Put your detective-like qualities to work by gaining knowledge toward a career in fighting cybercrime.



- Pre-requisite knowledge
- - -> Recommended pre-requisite knowledge
-  Certification preparation
-  Digital badge earned

Cybersecurity Jobs and Talent Bridge

60%

Of Talent Bridge employers
require some level of
cybersecurity expertise

86%

Of employers surveyed indicated
cybersecurity skills are
very/extremely important



“Cybersecurity is imperative to our business and with the innovation of cloud and IoT it is even more important.”

Richard Ackerman
VP of Workforce Development Red
River Technologies

Employers seeking Cyber skills



The certification advantage

“Six in 10 cybersecurity security jobs request certification.”

-Burning Glass Technologies, 2019



More earning potential

On average certified cybersecurity professionals are paid \$88K/year while those without certification earn \$67K/year



Job-ready skills and knowledge

Industry certifications prepare you for real-world jobs



Knowledge is power, but certification is the proof

- Cisco Certified CyberOps Associate
- CompTIA Cybersecurity Analyst Certification
- (ISC)² Information Security Certifications
- Global Information Assurance Certification (GIAC)



“Candidates with a certification definitely separate themselves from the crowd during the initial recruiting process. It shows the ability to master a specific technical skill, something that a successful consulting engineer will have to continue to do throughout their career.”

Pete Keuler

Manager, Associate Engineer Program for CDW



Thank You