ISSA Intl
Women in Security Special Interest Group (WIS SIG)

2030: Building a Diverse Cybersecurity Workforce
**Mission**

Connecting the World, One Cybersecurity Practitioner at a Time.

**Vision**

The WIS SIG is committed to developing women leaders globally, building a stronger cybersecurity community fabric, and enabling success across the globe.

**Creating Leaders Together**

ISSA WIS SIG embraces a spirit of collaboration within its organization and throughout the industry. We partner with organizations to provide leadership programs and services, and challenge these companies to create cybersecurity-oriented professional advancement opportunities for women.
WIS SIG Goals

• Foster the recruitment, retention and promotion of women within the cybersecurity industry
• Enhance women’s career growth by providing professional development events, career path information, mentoring and coaching services, and networking opportunities
• Cultivate leadership and technical competencies for women within the cybersecurity field
• Provide a global cybersecurity forum which recognizes women's professional contributions
• Continuously improve the ISSA WIS SIG's value proposition and ability to attract, develop, and retain a diverse community of women worldwide
Core Purpose
To promote a secure digital world.

Core Values

Integrity Evidenced by a reputation for trustworthiness earned through ethical, fair, transparent, and professional behavior.

Excellence Evidenced by a commitment to expertise and experience in our field.

Respect Evidenced in appreciation of the value of diverse perspectives and experience in promoting a culture of leadership and innovation in a global organization.

Developing and Connecting Cybersecurity Leaders Globally

ISSA is the community of choice for international cybersecurity professionals dedicated to advancing individual growth, managing technology risk and protecting critical information and infrastructure.
ISSA Strategic Goals

- **Leadership** ISSA will lead the global security community collaboration to protect society from security threats.

- **Program** ISSA will provide the profession with highly qualified practitioners and high quality education and training.

- **Influence** ISSA will serve as a respected and trusted source and advisor on information security related technology, education, standards, and legislation.
The Colorado Springs chapter maintains more than 500 active members and meets monthly with presentations and information of interest to security professionals. We also host two conferences: one in the spring and one in the fall. The Colorado Springs Chapter is proud to host the Cyber Security Training and Technology Forum (CSTTF), a two-day conference, and the Cyber Focus Day (CFD), a one-day conference, each year. Additionally, the Colorado Springs Chapter offers two CompTIA Security+ Exam Prep Review Seminars and an (ISC)² CISSP Exam Prep Review Seminar annually.

Board members: **President:** Colleen Murphy; **Exec Vice President:** Scott Frisch; **Vice President:** Ernest Campos; **Treasurer:** Mark Maluschka; **Recorder/Historian:** Erik Huffman; **Communications Officer:** Anna Johnston; **VP of Membership:** Dave Reed; **VP of Training:** Mark Heinrich; **Deputy Director of Professional Outreach:** June Shores; **Director of Certification:** Derek Isaacs

https://issa-cos.org/
2018 Events of Note

SAVE THE DATES – 2018 Local Events

• Security+ Exam Prep Review Seminar
  • 7 & 14 Apr 2018

• Cyber Focus Day Conference
  • 12 Apr 2018

• Rocky Mountain Information Security Conference 8 - 10 MAY 2018 (https://www.rmisc.org/)
The **ISSA Chicago** chapter focuses on bringing value-add events, conferences, and special events to members and the broader cybersecurity community within the surrounding CHICAGO geographic region.

**Board members:** President / Vendor Sponsorship: Valeri Baldwin; Vice President: Gregg Friedman; **Operations Director:** Monique Tripp; Treasurer: Mark Swiecicki; **Program Director:** Joann Davis; **Social Media Officer:** John Jones; Communications Director: Rob Sindelar; **Membership:** Robert Wagner; **Web Developer:** Steven McGrath; **Student Initiative Co-Chairs:** Steve Riess & Don Dress
2018 Events of Note

- (Periodic) **Chicago Technology Cooperative (CTC) meetings**
  - These meetings are with our sister organizations, Infragard, SIM, AITP, ISACA and focused on how we can do far greater things together. For example, coordinate calendar events so that we are not competing, discussion/planning on what/how to partner on events.

- **1 FEB 18 Industry Led Development of Healthcare Cybersecurity Best Practice Guide**
  - Erik Decker, University of Chicago Medicine, 2017 CISO of the Year Award Winner presentation to Chicago Chapter

- **12 APR 18 IIT Cyber Forensics & Security Conference** [Partner Event]

- **3 MAY 18 2017 Data Breach Investigative Report (DBIR)**
  - Dave Ostertag, VP Verizon Incident Response

http://issa-chicago.org/events/
2018 Events of Note

• 12 JUN 2018 **Secure XII, ISACA** Joint networking cruise event aboard the Odyssey

• 26-27 SEPT 2018 **Cyber Security Chicago** [Partner Event]
  • McCormick Place, Chicago, Illinois

• 27 SEPT 2018 **SIM Women's Summit** [Partner Event]
  • Hyatt Regency, Schaumburg
  • [http://simwomensummit.org/](http://simwomensummit.org/)

http://issa-chicago.org/events/
2017 GLOBAL SIG FOOTPRINT

- 101+/137 Chapters Served
- 98+/195 Countries Represented

2020 GLOBAL SIG FOOTPRINT GOALS

- ALL Chapters Served
- ALL Countries Served
SIG Liaisons - 2018

Atlanta GA

Central & South FL

Central MD & NOVA

Central TX

Chattanooga TN

Colorado Springs

Singapore

Silicon Valley CA

San Francisco CA

Richmond VA

Puerto Rico

Portland OR

Phoenix AZ

Orange County CA

National Capital

Los Angeles CA

Denver CO

Minnesota
Annual ISSA Membership Transitions - 1000+

Annual SIG Branded Events – 75+

SIG Youth Program Support - $100,000

Annual SIG Scholarship Funding - $100,000
Women in Security SIG

- **SIG Leadership**
  - Rhonda Farrell, Co-Founder
  - Christy Lodwick, Chapter Liaison
  - Cassandra Dacus, Partner Liaison

- **SIG History**
  - Inception 2010 followed by rapid growth
  - Partner Collaboration and Connect Events
  - Virtual and In-Person Events
  - International Footprint
  - Scholarships
  - Youth Program Support
  - Value-Add Chapter Offerings

- **SIG Intellectual Capital**
  - Monthly Webinars
  - Industry Collaboration Publications
  - Practitioner Blogs
Sara Avery – Co-Chair
Elizabeth Van Ackeren – Co-Chair
Mary Haynes - Secretary and Sponsorship
Debbi Blyth - Community Outreach
Danielle Wilson - Membership
Jen Wilson - Communications
Emily MacCormick - Treasurer
Nancy Philips - Community Outreach
WIS SIG Advisors

Candy Alexander
Andrea Hoy
Sandra M. Lambert
Debbie Christofferson
Jean Pawluk
Anne Rogers
2030: Building a Diverse Cybersecurity Workforce
Deidre Diamond is the CEO and Founder of CyberSN.com, a cyber security research and staffing company, and the Founder of brainbabe.org, a cyber security not-for-profit organization. Deidre’s vision and leadership has resulted in a dramatic decrease in the frustration, time and cost associated with job searching and hiring for cyber security professionals. Prior to CyberSN, Deidre was the CEO of Percussion Software, the first VP of Sales at Rapid7 (NYSE:RPD) and the VP of Staffing and Recruiting for the national technical staffing company Motion Recruitment. Deidre leads with a strong commitment to transparency, equality, training, support, high-productivity and love in the work force.
At age five Priyanka Komala gave an impromptu speech about an aeroplane which catapulted her into becoming the distinguished speaker she is today. Although she had followed the cultural expectation of getting a Masters to become an engineer and technologist, Priyanka knew she wanted to make a bigger impact, so she got her MBA. Priyanka enjoys sharing insights on happiness, personal growth, STEM, and the potential of STEAM (Science, Technology, Engineering, Art, and Math). At the US National Academy of Sciences, Engineering, and Medicine, she is responsible for creating and delivering the web strategy and future technological direction for a $30M division. She serves as the Vice President of DC Web Women and is on the board of Byte Back Next Generation Council. https://about.me/priyankakomala | @PriyankaKomala

https://www.nationalcyberwatch.org/event/2030-building-diverse-cybersecurity-workforce/
Panelist: Ms. Noel Kyle

Ms. Noel Kyle is a Program Manager within the Department of Homeland Security (DHS) Cybersecurity Education & Awareness Branch (CE&A). She manages nationally-focused workforce development and training programs such as the Federal Virtual Training Environment (FedVTE).

Noel is a subject matter expert in cybersecurity workforce development, with a focus on the human capital lifecycle from identifying and hiring talent to retaining and engaging workers. She has been closely involved with efforts to define cybersecurity work, such as with a refresh of the National Initiative for Cybersecurity Education (NICE) Cybersecurity Workforce Framework, and with work to develop cybersecurity recruitment and retention policies and programs. With more than six years’ experience studying and supporting the cybersecurity workforce at DHS and more than a decade of experience managing financial, marketing, and supply chain projects with Fortune 100 companies and small businesses, she has a unique and strategic perspective on overcoming challenges and identifying opportunities. Noel has a MBA from the University of Miami and an undergraduate degree from Old Dominion University. She also holds Project Management Professional (PMP) and Six Sigma Green Belt certifications.

https://www.nationalcyberwatch.org/event/2030-building-diverse-cybersecurity-workforce/
Panelist: Mr. Chad Loder

Founder and CEO of Habitu8, and Co-founder of Rapid7

Chad Loder is a security industry pioneer. As the former co-founder and VP of Engineering at Rapid7, Chad helped develop a family of cyber-security products that are still used in 120 countries today – an impressive portfolio that helped take the company from a private startup to a successful $900 MM IPO. These days, Chad combines startup agility with strong beliefs in culture and communication to revolutionize how Habitu8’s family of clients learn about and train for better security.

https://www.nationalcyberwatch.org/event/2030-building-diverse-cybersecurity-workforce/
Why do Firms Need Cyber Talent?

Rapidly expanding Cyber Threat landscape

Heavy investment in Cybersecurity startups

https://quid.com/feed/recent-cybersecurity-trends-in-4-charts
What is the CYBER Workforce Opportunity Space?

ISACA predicts a global shortage of 2,000,000 cybersecurity professionals by 2019.
How will the Future CYBER Workforce be Structured?

The 35 Job Categories of Cyber Security

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<thead>
<tr>
<th>Non-Technical Roles</th>
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<th>Leadership</th>
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<tr>
<td>Security Sales Account Manager</td>
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<td>Cybersecurity Attorney</td>
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<td>Security Awareness Trainer</td>
<td>Security Researcher</td>
<td>Compliance and Risk Manager</td>
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<td>Security Call Center Operator</td>
<td>Forensic Engineer</td>
<td>Security Product Manager</td>
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CyberSN
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https://twitter.com/cyber_sn/media
What “Initially” Brings Women to the CYBER Table?
What are the Biggest CYBER Career & Talent Challenges?

Biggest Skill Gaps

Cause of Cyber Talent Attrition

What Can Our CYBER Men Do to Help Women be more Successful?

Focus on Being a POSITIVE FORCE for CHANGE

• Mentors - Active listening and advisement
• Allies / Champions – Advocates and action orientation
• Cyber StartUP Considerations
  • VCs
  • Boards
  • Executive Teams
  • Workforce

“Gender equity unlocks everyone’s potential and that’s good for our future as individuals and all of society.”
Bob Moritz
Chairman of PwC International

It takes all of us. heforshe.pwc.com
THANK YOU!

Questions?

Chad, Deidre, Noel, Priyanka

chad@habitu8.io, dd@cybersn.com, noel.kyle@hq.dhs.gov, pkomala@umich.edu
Support Our SIGs!

• Financial
  • Ms. Andrea Hoy
  • Mr. Mikhael Felker

• Healthcare
  • Mr. Gary Long

• Security Awareness
  • Ms. Jill Feagans
  • Mr. Kelley Archer

• Women In Security
  • Ms. Rhonda Farrell
  • Ms. Christy Lodwick

http://www.issa.org/?page=SIGs
ISSA INTL SIG Membership Drive

ISSA International Memberships* are 20% off for SIG Members, use Discount Codes at Checkout: 20FSIG16, 20HCSIG16, 20SEASIG16, 20WISSIG16

*NOT APPLICABLE TO STUDENT MEMBERSHIPS
• ISSA International Service Offerings
  • CISO Executive Forum (Meets Quarterly)
  • Domestic and International Chapter Base
  • E-News
  • ISSA Intl Special Interest Groups
  • ISSA Industry Webinars
  • ISSA Journal
  • ISSA Web Conferences
  • Mentoring Programs
  • US and European Conferences
ISSA International
Events of Note

Cyber Resilience and Response: Keeping the lights on in the face of cyber attacks
January 25-26, 2018
Scottsdale Marriott at McDowell Mountains

The January ISSA CISO Executive Forum in Scottsdale, AZ will focus on Cyber Resilience: Keeping the lights on in the face of cyber attacks. Our interactive sessions will explore these trends and discuss: Anatomy of Paying the Ransom, the Forensics Tabletop, Public Cloud IR Preparedness, GDPR Impacts on IR, The Story of the OneLogin breaches. You’ll return to your organization armed with practical methods to address current issues, and can guide your teams to focus on areas of highest risk. Join your peers at this exclusive, CISO-only event. More info here.
# ISSA International 2018 Proposed Webinar Schedule

<table>
<thead>
<tr>
<th>JAN 2018</th>
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http://www.issa.org/?SIGs
2018 Global SIG Events of Note

• 06 FEB 2018 I will have what she is having.” 5 Beliefs & Behaviors of Highly Successful Women
  • Speaker: Maureen Berkner Boyt, Founder The Moxie Exchange
  • Location: Denver Women in Security Special Interest Group, Regis University
  • Registration: http://denver.issa.org/events/event/0/105-2018/162-women-in-security

• 22 FEB 2018 Culture Change that Sticks
  Driving a culture of security through design thinking and innovation
  • Speaker: Rebecca Rodskog, Founder, Rodskog Change Consulting
  • ISSA International Security Education and Awareness Special Interest Group
  • Registration: TBD – SAVE THE DATE

• 26 APR 2018 The Relationship Driven Cyber Leader
  Because People Do Business With People They Like
  • Speaker: Michelle Tillis Lederman, CPA, MBA, PCC
  • ISSA International Women in Security Special Interest Group
  • Registration: TBD – SAVE THE DATE
2018 Partner Events of Note

• **Leaders in Energy**
  • 24 JAN 2018 *Green Career Workshop*
    • https://leadersinenergy.org/green-career-workshop
  • 23 FEB 2018 *4th Annual Clean Energy and Sustainability Extravaganza* – University of Maryland
  • 16 AUG 2018 *Green Jobs Forum*
  • 7 DEC 2018 *5th annual Four Generations of Clean Energy and Sustainable Solutions*

• **National CyberWatch Center**
  • National Institute for Women in Trades, Technology & Sciences (IWITTS)
    • *More Female Students Strategy Session & STEM Success for Women Telesummit*
      • http://store.iwitts.org/cyberwatch
  • Community College Cyber Summit (3CS) 2018
    • Mt. Hood Community College, Portland, OREGON
      • https://www.my3cs.org/

• **Women in Cyberjutsu**
  • 15 FEB 2018 *Career Conversations (Monthly)*
    • https://womenscyberjutsu.org/events/EventDetails.aspx?id=1009324&group=
  • 12 APR 2018 *Happy Hour [Inside the Beltway] (Quarterly)*
    • https://womenscyberjutsu.org/events/EventDetails.aspx?id=1011121&group=
Scholarship Opportunities

• 01 FEB 18 AFCEA Central MD – Enlisted Service Members
  • Scholarship Info: https://centralmd.afceachapters.org/military-scholarship

• MAR, APR 2018 ISC² & Raytheon Scholarships
  • (ISC)² Women's Information Security Scholarship Scholarship due March 1, 2018
  • (ISC)² Undergraduate Information Security Scholarship Application due March 15, 2018
  • (ISC)² Graduate Information Security Scholarship Application due April 17, 2018
  • Raytheon
    • High school senior, first year undergraduate, mid-career professionals
    • https://iamcybersafe.org/scholarships/womens-scholarships/

• 01 FEB 2018 ACSA & SWSIS
  • https://cra.org/cra-w/scholarships-and-awards/scholarships/swsis/
Heinz College Strategic Partners Scholarship Award

Beginning in Fall 2017, in conjunction with its newly established agreement with ISSA, Heinz College will include ISSA as a participant in the Heinz College Strategic Partners Scholarships program. As part of this designation, Heinz College will award scholarships to incoming students in any of the full-time programs offered by Heinz and part-time students in the college’s Master of Science in Information Technology (MSIT) program who are currently a member of ISSA. The award will be made at the time of admission (no separate application is necessary) and full-time students will receive tuition reduction scholarship of at least $6,000 per semester, while part-time students will receive a 30% tuition reduction scholarship. To be considered, applicants should indicate their status as a ISSA Scholar on the application for admission in the “Partners” section. This scholarship series will be completely funded by the Heinz College operating budget.

Maximum Number of Scholarship Awards

Each year, a maximum of ten qualified ISSA members in the Heinz College’s incoming class can be awarded the CMU Heinz College Strategic Partners Scholarship.

For additional information, reach out to SIGs@issa.org
SheSoft Computer Championship for Girls; Culminating Awards Ceremony 2 JUN 2018

Interested in learning how to write computer programs for fun? Join other girls from grades 5 through 8 in the SheSoft 2017-18 annual software application championship for girls. You'll meet new people who have the same interests, have fun learning new things to use on your computer, and have success in the adventure. Think about a topic, create a project report and support them with a simple computer program. Mentors will be provided to complete your project for prizes such as laptops, tables, phones, gift cards and many more technology gadgets.

Visit SheSoft for more information. SheSoft is a 501(c)(3) organization dedicated to bridging the gender gap in technology by empowering young girls in upper elementary and middle school ages through seminars, webinars, workshops and software application competitions.

• Opportunities for WOMEN to sponsor an awards ceremony breakfast, speak on a morning panel, as well as attend and network / mentor our budding STEM and CYBER professionals!
2017 – 2018 Scholarship Opportunities

• Shon Harris Memorial Scholarship
• Howard A. Schmidt Scholarship
• E. Eugene Schultz, Jr. Memorial Scholarship
• ISSA WIS SIG Scholarship
• ISSAEF General Donation

If you shop Amazon, go to AmazonSmile, register the **ISSA Education and Research Foundation** as your non-profit of choice, and shop through AmazonSmile. Many of your normal purchases will apply, and the Foundation will receive a small donation from each. https://smile.amazon.com/ch/20-1154881
The ISSA Journal – 2018 Editorial Calendar

**JANUARY**
Best of 2017

**FEBRUARY**
Legal, Regulations, Ethics
Editorial Deadline 12/15/17

**MARCH**
Operational Security — the Basics of Infosec —
Editorial Deadline 1/15/18

**JUNE**
Practical Application & Use of Cryptography
Editorial Deadline 4/15/18

**JULY**
Standards Affecting Infosec
Editorial Deadline 8/15/18

**AUGUST**
Foundations of Blockchain Security
Editorial Deadline 6/15/18

**SEPTEMBER**
Privacy
Editorial Deadline 7/15/18

**OCTOBER**
Security Challenges in the Cloud
Editorial Deadline 8/15/18

**NOVEMBER**
Impact of Malware
Editorial Deadline 9/15/18

**DECEMBER**
The Next 10 Years
Editorial Deadline 10/15/18

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Please contact **SIGs@issa.org** if you are interested in submitting a SIG column entry!
Registration Info for our WIS SIG Portal

• Non-members:

https://www.issa.org/general/register_member_type.asp?

• Members WISSIG@issa.org or Press Join on our SIG page once you are logged in!
2030: Building a Diverse Cybersecurity Workforce
What is the CYBER Challenge Space?

Women in Cybersecurity: Underrepresented, untapped potential (PwC)

WOMEN IN CYBERSECURITY

Ratio of Women in Cybersecurity

Women Leaders in Cybersecurity

Career Level Positions of Women in Cybersecurity

The Cybersecurity Field Needs YOU!

Source: 2017 Global Information Security Workforce Study

https://www.pwc.com/us/en/cybersecurity/women-in-cybersecurity.html,
https://www.eccu.edu/3-reasons-why-women-should-embrace-the-cybersecurity-industry/
What Does the CYBER Landscape Look Like?

https://www.crowehorwath.com/cybersecurity-watch/5-essential-elements-cybersecurity/
“Toxic workforce culture-related turnover in tech is a $16B per year problem.”

2000 Tech Employees surveyed - 4 key takeaways

1. Unfairness or mistreatment drives turnover
2. Experiences differ dramatically across underrepresented groups
3. Unfairness costs billions each year
4. Diversity and inclusion initiatives can improve culture and reduce turnover— if they are done right. 5 key take-aways:

   • Better pay (73%)
   • Improved company leadership (69%)
   • Promotion (65%)
   • Greater work-life balance and schedule flexibility (65%)
   • A more positive and respectful work environment (63%)
WHAT is Driving Cyber Change?

Important RISK Focus Areas

2016-2017 Leading cyber security spending priorities among enterprises

### What are Key Long term CYBER Market Drivers?

| 1 Infrastructure revolution | • Increase in penetration of high speed broadband and wireless networks  
• Centralisation of computing resources and widespread adoption of cloud computing  
• Proliferation of IP (internet protocol) connected devices and growth in functionality  
• Improved global ICT (Information and Communications Technology) infrastructure enabling greater outsourcing  
• Device convergence and increasing modularisation of software components  
• Blurring work/personal life divide and ‘Bring Your Own’ approach to enterprise IT  
• Evolution in user interfaces and emergence of potentially disruptive technologies |
|---|---|
| 2 Data explosion        | • Greater sharing of sensitive data between organisations and individuals  
• A significant increase in visual data  
• More people connected globally  
• Greater automated traffic from devices  
• A multiplication of devices and applications generating traffic  
• A greater need for the classification of data |
| 3 An always-on, always-connected world | • Greater connectivity between people driven by social networking and other platforms  
• Increasingly seamless connectivity between devices  
• Increasing information connectivity and data mining  
• Increased Critical National Infrastructure and public services connectivity |
| 4 Future finance | • Rising levels of electronic and mobile commerce and banking  
• Development of new banking models  
• Growth in new payment models  
• Emergence of digital cash |
| 5 Tougher Regulation and Standards | • Increasing regulation relating to privacy  
• Increasing standards on Information Security  
• Globalisation and net neutrality as opposing forces to regulation and standardisation |
| 6 Multiple Internets | • Greater censorship  
• Political motivations driving new state/regional internets  
• New and more secure internets  
• Closed social networks  
• Growth in paid content |
| 7 New Identity and Trust Models | • The effectiveness of current identity concepts continues to decline  
• Identity becomes increasingly important in the move from perimeter to information based security  
• New models of trust develop for people, infrastructure, including devices, and data |

What are the Main CYBER Workforce Challenges?

1.5 Million MORE cybersecurity professionals will be needed to accommodate the predicted global shortfall by 2020.

- On average, 52% of IT professionals surveyed stated fewer than 25% of all applicants were qualified.

The biggest skill gaps of today’s cybersecurity professionals are:
- Communication Skills: 46%
- Technical Skills: 42%
- Ability to Understand the Business: 72%

Cybersecurity job postings took 8% longer to fill than IT job postings overall.

- Information Security
- Network Setup
- Auditing
- Network Protocols
- Core Database, Coding and Scripting
- Systems Administration

Expertise required for various cybersecurity roles in demand:

Fastest growing skills in cybersecurity job postings:
- Python
- HIPAA
- Risk Management
- Internal Auditing
- Audit Planning

The top 5 hardest to fill skills in cybersecurity job postings are:
- Network Architecture
- Network Attached Storage (NAS)
- Software Issue Resolution
- Internet Security
- Legal Compliance

Computer and mathematical occupations will grow much faster than the average job during 2012–2024.

- Manufacturing and Related
- Professional Services
- Finance and Insurance
- Business Data Processing

Approximately 10% of the current cybersecurity workforce are comprised of women.

What is the Cyber Skills Crisis?

Cybersecurity Skills Crisis

Too Many Threats

- 62% increase in breaches in 2013
- 1 in 5 organizations have experienced an APT attack
- US $3 trillion total global impact of cybercrime
- 2.5 billion exposed records as a result of a data breach in the past 5 years
- 31 1/2 months is the average time an advanced threat goes unnoticed on victim's network

Too Few Professionals

- 62% of organizations have not increased security training in 2014
- 1 out of 3 security pros are not familiar with advanced persistent threats
- <2.4% graduating students hold computer science degrees
- 1 million unfilled security jobs worldwide
- 83% of enterprises currently lack the right skills and human resources to protect their IT assets

Enterprises are under siege from a rising volume of cyberattacks.

At the same time, the global demand for skilled professionals sharply outpaces supply. Unless this gap is closed, organizations will continue to face major risk. Comprehensive educational and networking resources are required to meet the needs of everyone from entry-level practitioners to seasoned professionals.

What Cyber Careers are the Hottest?

**TOP PAYING JOBS IN CYBER SECURITY**

Average Salaries – Source: Dice, 2015

- Lead Software Security Engineer, $233,333
- Chief Security Officer, $225,000
- Global Information Security Director, $200,000
- IT Security Consultant, $198,909
- Chief Information Security Officer, $192,500
- Director of Security, $178,333

Other Top Jobs include: Cyber Security Lead $175,000; Lead Security Engineer, $174,375; Cyber Security Engineer, $170,000; and Application Security Manager, $165,000

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https://www.slideshare.net/AmyHughey/accelerating-your-cyber-security-career-north-texas-edition
What Does the Road to CISO look like?

- Managerial: 18%
- Security consulting: 18%
- Operational: 17%
- Governance, risk and compliance: 12%
- Network security architecture: 10%
- Thread detection and remediation: 5%
- Data security: 5%
- Auditing process and procedures: 5%
- Software development: 4%
- Regulatory compliance: 3%
- Virtualized/cloud network security: 2%
- Maintaining physical appliances: 1%

What are Relevant CISO Statistics?

Rising CISO Salaries & Demand

Current Job Openings: 465
Salary Range: $126K to $311K
Average Posting Period: 47 Days

Top Job Titles
Chief Information Security Officer
Director Information Security
Director Information Technology
Director Information Technology Security

Top Skills
Information Security
Application Security
Disaster Recovery
Cyber Security
SDM

Top Certifications
CISM
CISSP
CISSP
CRISC
PMP

The 10 Biggest Issues Facing CISO's

- APT / Cyber Threats
- Cloud Security
- Application Security
- Software Defined Networking (SDN)
- Executive Level Protection
- Network Transformation
- Malware/Spyware
- Government Sponsored Breaches
- Big Data Event Analysis

Top 6 Candidate Locations

Washington, D.C.
Job Volume: 37
Salary Range: $130K - $344K
Average Salary: $233K
Candidate Supply: 500

New York, NY
Job Volume: 61
Salary Range: $140K - $367K
Average Salary: $260K
Candidate Supply: 1,200

San Francisco, CA
Job Volume: 20
Salary Range: $154K - $380K
Average Salary: $249K
Candidate Supply: 300

Los Angeles, CA
Job Volume: 16
Salary Range: $138K - $341K
Average Salary: $233K
Candidate Supply: 500

Chicago, IL
Job Volume: 19
Salary Range: $132K - $328K
Average Salary: $246K
Candidate Supply: 500

San Jose, CA
Job Volume: 16
Salary Range: $149K - $368K
Average Salary: $246K
Candidate Supply: 1,600

http://www.silverbull.co/infographics/
How Does the (NICE) Cybersecurity Workforce Framework Fit?

What Are Most Important Components of the (NICE) Cybersecurity Workforce Framework?

How Do We Build the RIGHT Diverse Cyber Team?

Build the right team

There is a skills shortage – you need to think and act outside the box!

Broaden your horizons
Think about potential candidates you may not usually consider. It is not necessary to have a computer science degree before embarking on a career in the field. Skills are transferable, and should be viewed as such.

Look within
Look at the IT culture and systems you have in place. Cybersecurity professionals are interested and passionate about technology, so make sure that you are offering tools that they can use effectively and are familiar with.
What are the Best CYBER Career Resources

CyberSeek.org - free interactive resource for cybersecurity job seekers, sponsored by NIST, CompTIA, and NICE.

https://www.slideshare.net/MatthewRosenquist/challenges-for-the-next-generation-of-cybersecurity-professionals-matthew-rosenquist
What Elements Foster CYBER Diversity?

CYBER WORKFORCE DIVERSITY

HOW DO WE GET THERE?

1. INSPIRE
   Encourage and develop positive associations with cyber careers choices

2. EDUCATE
   Share information on specific career paths and training opportunities

3. RECRUIT
   Facilitate career entry or career transition to technical and cyber fields

4. ADVANCE
   Enable the promotion of workforce from entry level to senior positions

5. RETAIN
   Provide resources, training, flexibility to grow and retain workforce

6. INVEST
   Give back to the next generation by sharing, inspiring and educating

https://www.wicys.net/about/
What Else are Companies Doing to Get Diversity Right?

Inclusion Around The World

Here are a few of the things Symantec is doing to actively promote and support diversity and inclusion around the world:

1. **Attract Diverse Talent**
   - Attract, retain and develop diverse employees

2. **Ensure Inclusivity**
   - Ensure an inclusive experience for our employees, customers and value chain

3. **Invest in the Future**
   - Invest in science, technology, engineering and mathematics (STEM) education to increase the pipeline of diverse technology talent

4. **Global Equality**
   - Promote equality on a global level

5. **Engage Leadership**
   - Engage leadership in diversity planning

6. **Equal Opportunities**
   - Design talent development opportunities for women and under-represented minorities
We Made It INTO CYBER, Now What?