CYBER+ GIRLS

SANS | GIAC

A program by CyberSafe Foundation,
in partnership with the SANS Institute

CYBERGIRLS+ (COHORT 1)

Impact Report

Advancing Women in Cybersecurity through Global Certification Access

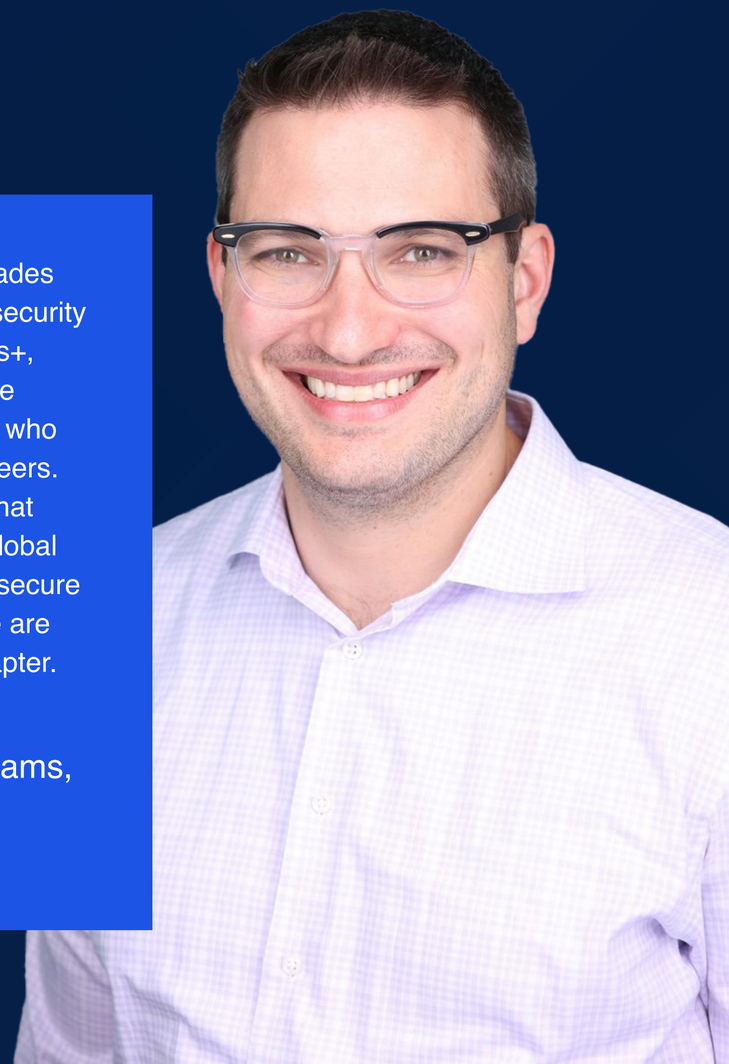
Message from Our Leaders

The CyberGirls Fellowship has proven that when young women are given access to technical training, their lives and the communities around them change. But entry-level is just the beginning. CyberGirls+ is the next step. Together with SANS Institute, we are opening doors to advanced certifications, specialized roles, and global opportunities without financial barriers. This is how we build lasting cyber resilience in Africa.

Confidence Staveley
Executive Director, CyberSafe Foundation

At SANS, we have spent decades training the world's top cybersecurity professionals. With CyberGirls+, we are bringing that same elite instruction to women in Africa who are ready to level up their careers. These are the kinds of skills that close workforce gaps, open global doors, and help build a more secure world from the ground up. We are proud to support this next chapter.

Max Shuftan
Director of Mission Programs, SANS Institute



Executive Summary

The global cybersecurity workforce continues to face a dual challenge: a widening skills gap and persistent underrepresentation of women in advanced technical roles. Although women comprise approximately 24 to 25 percent of the cybersecurity workforce worldwide, their presence declines further at specialist and leadership levels. Access to world-class technical training and globally recognised certifications remains a critical lever for closing this gap.

For many high potential women, particularly across developing regions, the cost of specialised cybersecurity training presents a decisive barrier. Advanced certifications require substantial financial investment, limiting progression from foundational capability to globally competitive expertise. Without targeted intervention, capable professionals risk remaining under positioned in an industry that urgently requires their talent.

CyberGirls+ was launched by CyberSafe Foundation in partnership with SANS Institute to directly address this structural constraint. Designed exclusively for CyberGirls Fellowship alumni, the program provides advanced SANS training and a GIAC (Global Information Assurance Certification) attempt at no cost to participants. By removing financial barriers and creating access to world-class training, CyberGirls+ establishes a clear pathway from early career entry to technical specialisation.

This report presents clear evidence that targeted access to advanced SANS training and certification is not merely developmental; it is catalytic. By enabling high-potential women to attain globally respected credentials, the CyberGirls+ partnership is strengthening technical capacity and expanding Africa's contribution to the cybersecurity workforce. As we look to the future, this proven model provides a scalable foundation to further close critical skills gaps and ensure a more inclusive, resilient, and globally competitive cybersecurity ecosystem.

Key Outcomes

Cohort 1

Through a SANS-supported in-kind pilot in 2025, 10 high-potential CyberGirls alumni received access to world-class cybersecurity training delivered by SANS Institute, alongside the opportunity to pursue globally recognised GIAC certifications. This partnership created a direct pathway for African women in cybersecurity to access advanced technical education that is typically financially inaccessible.

90%

of CyberGirls+ participants successfully earned internationally recognised GIAC certifications, significantly strengthening their technical credibility and positioning them competitively within the global cybersecurity workforce.

Technical Growth

- Through intensive SANS training, participants progressed from foundational cybersecurity knowledge to specialised technical competence in high-demand cybersecurity domains, demonstrating measurable growth in expertise and professional confidence.

Career Advancement

- Following the program, all participants reported tangible career advancement. Alumni moved into more advanced technical roles, received promotions, secured speaking and consulting opportunities, and gained increased professional visibility within the global cybersecurity ecosystem.

Beyond certifications and career progression, the program also transformed professional identity. Access to SANS training enabled participants to see themselves operating at the same global standard as leading cybersecurity professionals, strengthening their confidence, leadership presence, and long-term career aspirations.

Why CyberGirls+ Matters?

Women remain significantly underrepresented in cybersecurity, particularly in advanced technical and specialist roles. While foundational programs have expanded entry into the field, access to structured pathways for specialised technical advancement has remained limited. As a result, many capable professionals encounter barriers when progressing into higher responsibility and leadership positions.

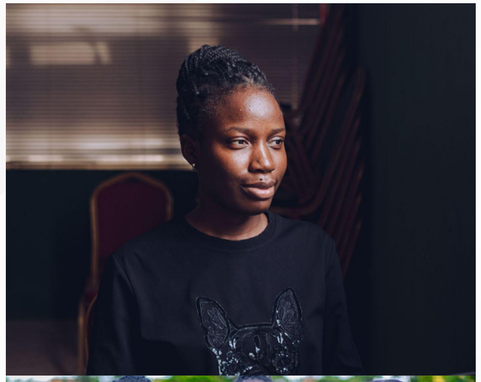
At the same time, the global cybersecurity skills gap continues to widen. Organizations require professionals equipped with expertise that extends well beyond entry level fundamentals. CyberGirls Fellowship alumni possess strong foundational capabilities; however, advancing those skills through world class technical training is essential for upward mobility and long-term career growth.

For many alumni across our community, the cost of specialised training and global certification is a significant barrier. Without deliberate intervention, high potential talent risks stagnation, not due to lack of competence, but due to lack of access.

CyberGirls+ directly addresses this gap. Through scholarship based advanced cybersecurity training and globally recognised certification pathways, the program removes financial barriers and unlocks access to world-class technical education. Building on years of impact across Africa, where thousands of women have been trained across dozens of countries, CyberGirls+ represents the next step, moving from entry level access to advanced specialisation.

By expanding access to globally respected certifications, CyberGirls+ enables women across Africa to compete for cybersecurity roles on equal footing, strengthen the region's cyber talent pipeline, and contribute meaningfully to the global cybersecurity workforce.

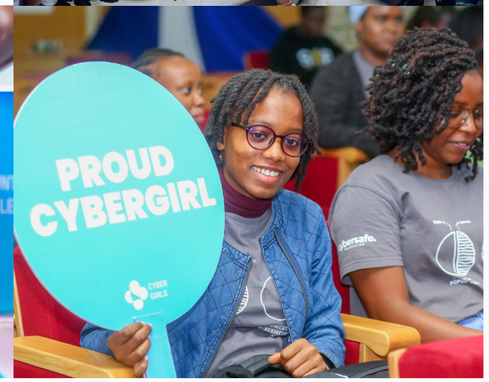
Program Design



SANS delivers renowned, hands-on cybersecurity courses and globally recognized certifications, ensuring a rigorous and high-quality program. CyberGirls+ is dedicated to training and equipping CyberGirls alumni who have completed the initial fellowship and are working in junior-level IT or entry-level cybersecurity roles.

Building on the success of the 1-year CyberGirls Fellowship, CyberGirls+ offers a next-level career advancement pathway exclusively for alumni, providing access to professional development opportunities. The selected CyberGirls alumni have displayed high-potential and have the skills needed to strengthen the cyber workforce and support future industry growth.

SANS certifications are internationally recognised as a gold standard in cybersecurity expertise. Through this partnership, participants were not just trained, they were credentialed at a global level, positioning them competitively in the international workforce.



2025 Cohort 1 Overview

The pilot cohort included ten CyberGirls alumni from Nigeria, Kenya, and Zimbabwe, with representation from all four cohorts of the CyberGirls Fellowship. Participants came from different stages of their careers; from students transitioning into the workforce to mid-level professionals seeking technical specialisation. The diversity of starting points makes the outcomes even more meaningful, further proving that regardless of the current occupational status or educational background participants can achieve the desired outcomes.

Selected CyberGirls alumni received SANS training, and a GIAC certification exam attempt from the following courses:

- SEC504: Hacker Tools, Techniques, and Incident Handling
- SEC522: Application Security: Securing Web Applications, APIs, and Microservices
- SEC542: Web App Penetration Testing and Ethical Hacking
- SEC588: Cloud Penetration Testing
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- FOR508: Advanced Incident Response, Threat Hunting, and Digital Forensics

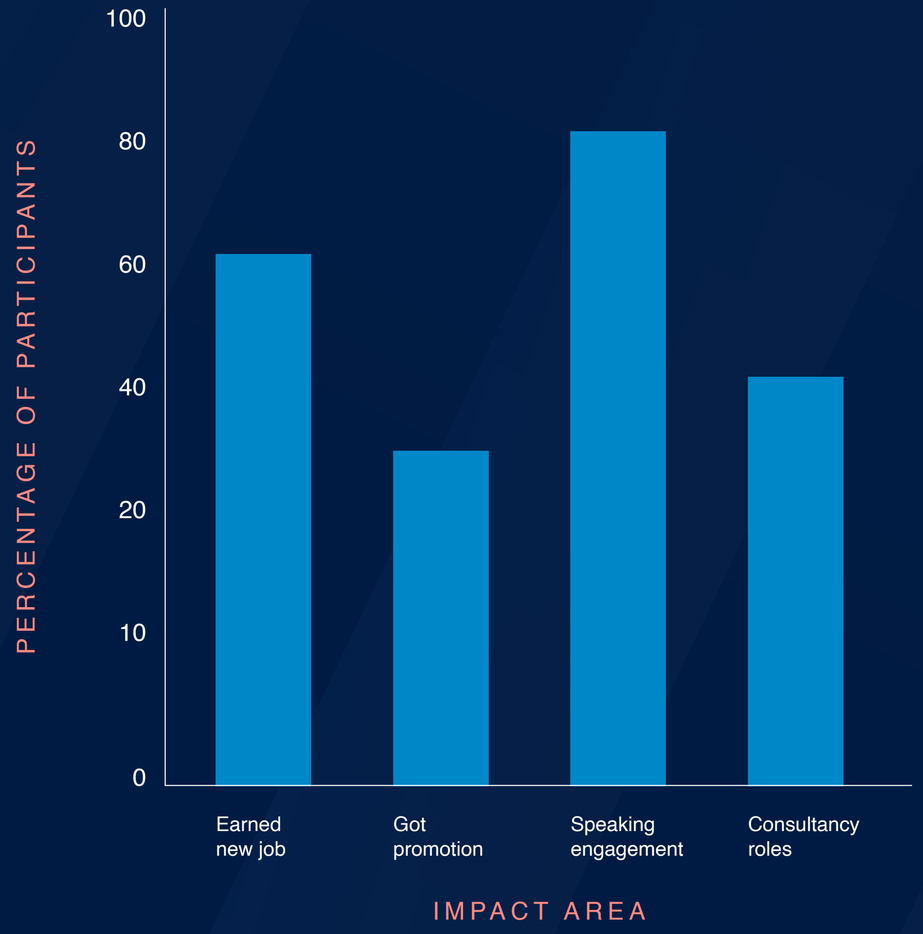
CyberGirls+ participants undertook advanced SANS training and earned the following GIAC (Global Information Assurance Certification) tracks certifications:

- Incident Handling (GCIH)
- Web Application Defence (GWEB)
- Web Application Penetration Testing (GWAPT)
- Cloud Penetration Testing (GCPN)
- Digital Forensics and Incident Response (GCFA)

These certifications aligned with requirements for advanced roles such as Incident Responder, Threat Hunter, Web Application Pen Tester, Cloud Security Analyst and SOC Manager. SANS delivered the training online and participants were supported by mentors from CyberSafe Foundation.

2025 Cohort 1 Impact at a Glance

Between August and October 2025, all ten participants completed their selected SANS training courses, which combined hands-on labs, real-world scenarios, and high-quality instructor-led sessions. Following this, they proceeded to attempt the GIAC certification examination, marking an important milestone in their professional development.



The data reflects the number of participants who have progressed into advanced technical roles, achieved career advancements, and secured speaking or consulting opportunities following their participation in the program.

2025 Cohort 1 CyberGirls+ Spotlight Stories

The CyberGirls alumni network spans 27 African countries. For this CyberGirls+ SANS pilot cohort, the 10 selected participants represented three countries.

Nigeria

Kenya

Zimbabwe

Read their stories

Anna Kamene
Cohort 4.0
Web Application Defence (GWEB)

A landmark certification that unlocked a bigger vision and global opportunities

For Anna, the SANS training experience was both technically rigorous and personally affirming. The structured handbooks, flexible learning tools, and immersive labs created a learning experience that strengthened both her skills and her mindset. This structure allowed her to absorb complex application security concepts at a steady, sustainable pace.

The GWEB (Web Application Defence) certification strengthened her foundation in web and API security, while shaping how she thinks about security work. She describes a shift in mindset, showing up more prepared, aiming higher, and committing to continuous growth. Since the training, she has actively expanded her focus into API security and bug bounty practice, building on the practical base the course provided. The certification has also positioned her as a voice in the cybersecurity community, opening doors to speaking and mentorship opportunities.

This opportunity made me realise that the goals I once saw as distant are actually within reach when the right support meets hard work.

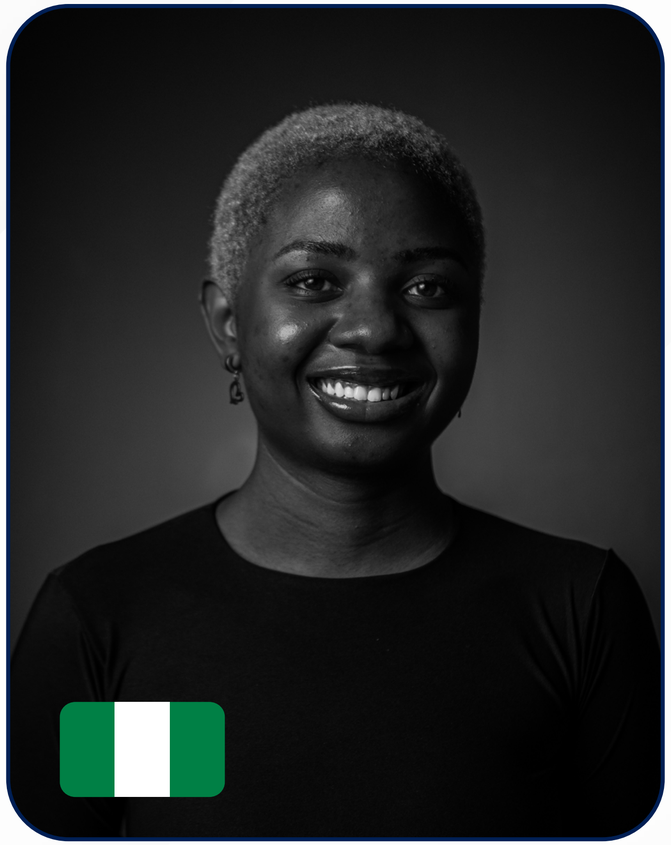
Abigail Inyang
Cohort 1.0
Web Application Penetration Testing (GWAPT)

From uncertainty to confident precision in web application security

Before CyberGirls+, Abigail knew web application penetration testing was an area she needed to strengthen. The SANS SEC542 (Web App Penetration Testing and Ethical Hacking) training provided exactly that depth she needed. The blend of video lessons, detailed course books, hands-on labs, workbooks, and challenge-based exercises made the learning practical and immersive. From foundational information gathering through to advanced vulnerabilities such as SSTI, prototype pollution, CSRF, and complex injection attacks, the course allowed her to close real skill gaps in a disciplined way.

Through rigorous labs, challenges, and repeated practice, Abigail developed not only technical competence but exam strategy, discipline, and professional confidence. The experience clarified her career direction in application security and web penetration testing, and the GWAPT (Web Application Penetration Testing) certification has already begun to increase her professional visibility and job opportunities. What once felt like a weak area is now one of her strongest.

SEC542 training didn’t just teach me web application penetration testing, it showed me that I am capable of mastering the areas I once doubted myself in.



Bisola Adediji
Cohort 1.0
Incident Handling (GCIH)

From Defender to Architect: Mastering the Art of Incident Response

Bisola joined the CyberGirls Fellowship with commitment to specialise in defensive security operations as a blue teamer. She has since worked across multiple sectors defending organizations, including CSOs, from digital threats. Already committed to defensive security operations, she intentionally chose SEC504 (Hacker Tools, Techniques, and Incident Handling) course to address a critical gap in her capabilities of understanding attackers' behaviour and translating that knowledge into stronger incident response.

The training transformed how she approaches incident response, equipping her with practical memory forensics skills, log correlation techniques, and structured incident handling methodologies across on-premises and cloud environments. The real-world breach scenarios shared during training grounded the knowledge in reality. The result is not just new skills, but leadership growth.

The CyberGirls+ sponsorship served as a pivotal catalyst for Bisola's career; by removing prohibitive cost barriers, it empowered her with world-class training that has become instrumental to her professional trajectory.

The knowledge acquired has given me the confidence to undertake more ambitious projects, and I am currently leading the development of an incident response lab for a cross-functional team – a project I would not have felt equipped to manage prior to completing GCIH.

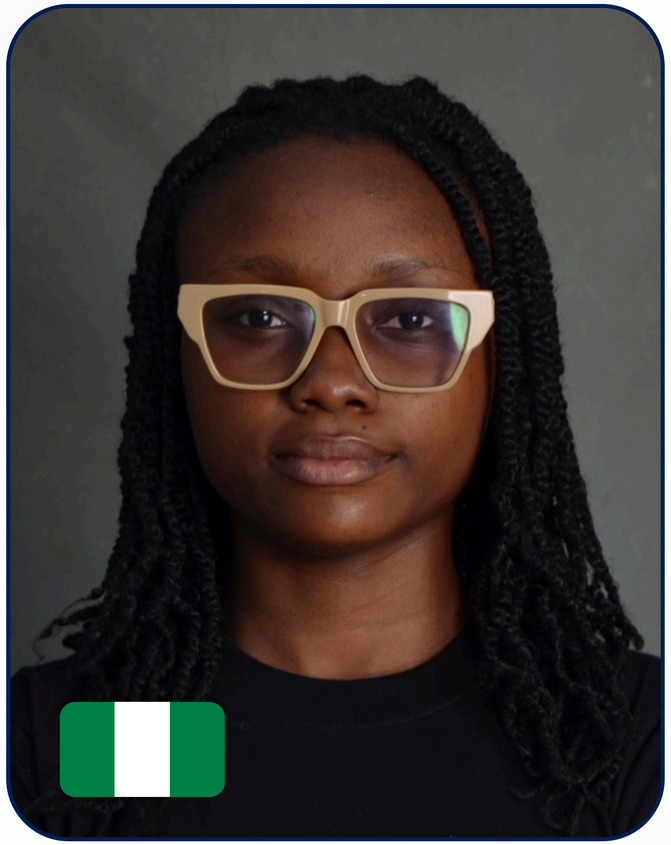
Gamuchirai Muchafa
Cohort 4.0
Incident Handling (GCIH)

Mastering the attacker's mindset to become a more formidable defender

Gamuchirai describes the SEC504 (Hacker Tools, Techniques, and Incident Handling) training as a turning point in how she thinks about security. The flexible, hands-on learning approach and practical exercises exposed her to offensive tools, cloud attack paths, forensics techniques, and real-world exploitation techniques, while also strengthening her incident response mindset. She now approaches security challenges from both red and blue team perspectives, allowing her to understand attacks more deeply and respond more effectively.

Although immediate job changes are still ahead, the internal transformation is clear. Gamuchirai is more technically grounded, strategically expanding her offensive, web and application security skills, and preparing for broader consulting and response roles.

Mastering the attacker's playbook has fundamentally transformed my approach to security. By bridging the gap between offensive tactics and defensive strategy, I have moved beyond simply protecting systems to actively anticipating threats. This dual perspective provides a level of precision and foresight that is essential for modern defense.



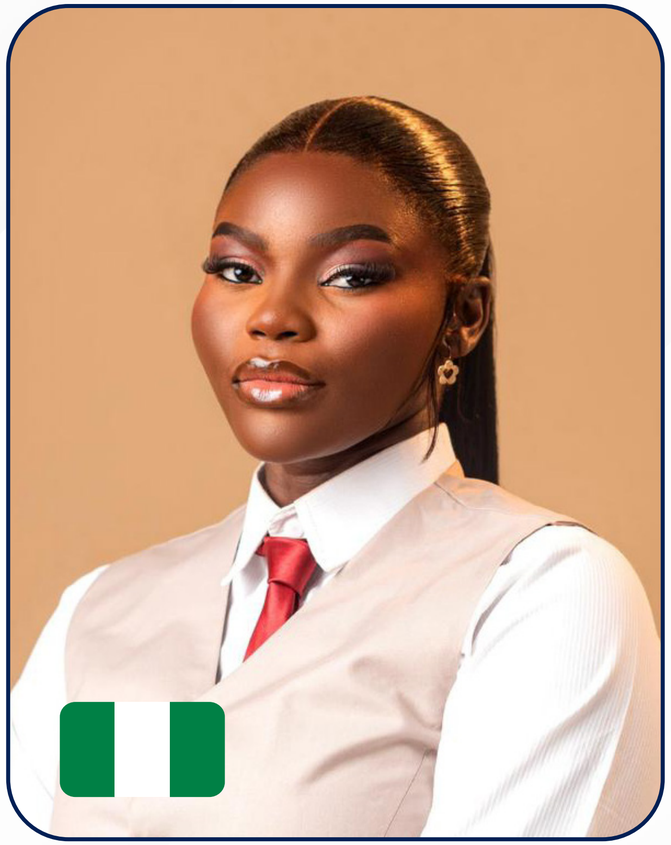
Oluwamayowa Agoro
Cohort 3.0
Incident Handling (GCIH)

Elevating technical fluency into a high-impact global competitive edge

For Oluwamayowa, CyberGirls+ journey was the catalyst for a total professional metamorphosis. She started the training with a deep-seated aversion to PowerShell, describing their relationship as “water and fire,” but through the training’s rigorous, multi-modal immersion, she turned that intimidation into her most formidable technical asset. The structured reinforcement of concepts across books, hands-on and lightning labs, videos, and index building created lasting mastery for her. This mastery quickly translated into tangible market value, proving that her skills now command respect on a global scale.

Before completing the training, Oluwamayowa’s impact within her organization was both immediate and tangible. Her ability to analyse threats and clearly articulate incident response strategies has earned the recognition of senior leadership and accelerated her progression into mid-level responsibilities. Once an inaccessible dream due to financial barriers, this CyberGirls+ scholarship served as the bridge to a career where she no longer just participates, she leads with a sharp, intuitive command of her craft.

GCIH certification forced me to face my technical ‘fire’ – PowerShell, and turn it into a tool I now command with ease. I’ve moved from a place of avoidance to a state of technical fluency where the knowledge flows naturally because it is so deeply rooted. CyberGirls+ has given me a visible edge in the global market and that has fundamentally redefined how I see my future in the cybersecurity industry.



Damilola Abiona
Cohort 3.0
Web Application Penetration Testing (GWAPT)

From technical growth to recognised security leadership

The realism of the CyberGirls+ training left a lasting impression on Damilola. Rather than focusing solely on theory, the course explored how attacks unfold in real environments and how security professionals must respond with structure and precision. This shifted how she approaches problems, she now analyses systems more methodically, identifies deeper weaknesses, and communicates risks more clearly.

Within just two months of earning her GIAC certification, Damilola was named the 2025 API Security Person of the Year by APIsec University. This global award recognised her dedication to training hundreds of women through the CyberSafe API Security initiative. Such a prestigious milestone underscores the immediate professional authority unlocked by her certification, representing an achievement that would have been a distant goal prior to her SANS training.

Since receiving this opportunity, my career direction has become much clearer. It strengthened my professional credibility, opened doors to more advanced cybersecurity work, and gave me the confidence to take on teaching, mentoring, and leadership roles in the cybersecurity community. It has also reinforced my commitment to making high-quality cybersecurity education more accessible to others who face similar barrier.

Ezinne Kalu
Cohort 3.0
Web Application Defence (GWEB)

Deepening application security expertise with global validation

Ezinne, an application security engineer, already possessed industry experience. However, the depth and structure of the SEC588 (Cloud Penetration Testing) course elevated her expertise to a new level. The comprehensive materials, clarity of instruction, and accessible learning tools helped her refine her understanding of application security beyond what most courses offer.

The GWEB certification has served as a powerful validator of Ezinne's expertise, directly increasing her competitiveness for mid-level roles. This milestone has translated into immediate career momentum, with her taking on greater responsibilities and gaining increased professional visibility through technical presentations and knowledge sharing.

Earning this certification has solidified my standing as an Application Security Engineer. I now find that my expertise aligns seamlessly with global industry requirements, as I possess the specialised skills and rigorous training that top-tier technical roles demand.

Shalom Favour
Cohort 1.0
Digital Forensics and Incident Response (GCFA)

From security analyst to digital forensics specialist

The FOR508 (Advanced Incident Response, Threat Hunting, and Digital Forensics) course marked a defining moment in Shalom's professional journey. Through rigorous, hands-on forensic labs, she developed structured investigative methodologies and a disciplined approach to evidence analysis. She gained practical skills in Windows forensics, memory and registry analysis, timeline creation, and incident response processes. More importantly, she developed the mindset of an investigator, methodical, analytical, and confident in interpreting attacker behaviour.

This opportunity significantly strengthened her technical competence as a security analyst and sharpened her professional direction. Before GCFA, she had a clear interest in digital forensics and incident response, but the training brought structure, clarity, and a disciplined investigative mindset to that interest. She did not simply learn how to analyse artefacts; she learned how to think like an investigator, methodically following evidence, understanding attacker behaviour, correlating data across systems, and communicating findings with precision. That shift has fundamentally redefined how she approaches investigations and the standard to which she now holds her work.

The impact of this opportunity has been both immediate and measurable for Shalom. After completing the GCFA examination, she secured a new role aligned with DFIR and SOC operations that increased her income by approximately 320%. Beyond the financial improvement, Shalom now has a clearer career direction, greater professional credibility, and increased confidence during interviews, technical discussions, and real-world investigations.

The CyberGirls+ scholarship made this transformative experience possible, enabling a shift in mindset that has fundamentally changed how I approach investigations. While the value of SANS training is undeniable, the cost would have made it inaccessible to me without financial support. Receiving the scholarship from CyberSafe Foundation did more than remove a barrier; it opened a door to world-class training that directly altered the trajectory of my career and professional confidence.

Jacklyne Mbuthia
Cohort 2.0
Cloud Penetration Testing (GCPN)

From specialised cloud expertise to building a legacy of identity security leaders

As a multi-cloud security engineer and former CyberGirls mentor, Jacklyne views her time as a CyberGirls+ participant as more than just a technical milestone; it was a defining moment that reshaped her professional trajectory. The training came during a major life transition and reigniting her passion and giving clarity about her long-term vision.

Through SEC588 (Cloud Penetration Testing) course, Jacklyne bridged the critical gap between offensive tactics and identity security, sharpening her strategic approach to risk and threat modeling within cloud and identity environments. This growth has directly informed her current mission of architecting a specialised Identity and Access Management (IAM) security academy under CyberSafe Foundation. For Jacklyne, CyberGirls+ impact extends far beyond technical mastery; it has redefined her leadership path and her long-term commitment to empowering the next generation of identity security specialists.

Jacklyne highlights how CyberGirls+ has empowered young women like herself to emerge as resilient, high-impact cybersecurity professionals. She further shares how this partnership has expanded the horizons of what is possible, enabling young women to envision a more ambitious future while securing the technical opportunities that lead to systemic change and an improved quality of life.

CyberGirls+ provided the mental stretch I didn’t know I needed. It’s impossible to go through this training and remain the same; it stirs something deep within your professional DNA. Beyond the rigorous technical training, the sheer passion of the instructors reignited my own. I have emerged not just with new skills, but with a relentless drive to master my craft and strive for excellence every day.

Naomi Emma Ekwealor
Cohort 2.0
Incident Handling (GCIH)

Turning technical curiosity into a formidable weapon for digital defense

For Naomi, being selected as one of the ten SANS x CyberGirls scholarship beneficiaries marked a pivotal evolution in her career. The SEC504 (Hacker Tools, Techniques, and Incident Handling) course under Joshua Wright's tutelage provided far more than a standard curriculum; it was a high-stakes immersion into the realities of world-class incident handling.

While she had encountered tools like Netcat in the past, the training challenged her to unlearn her assumptions and master the toolset with the precision of a seasoned practitioner. From the nuances of PowerShell to the strategic application of Metasploit, this experience served as a complete professional reset. Naomi has emerged from CyberGirls+ with the technical grit required to face real-world threats head-on.

> **CyberGirls+ did more than just teaching me new tools; it showed me how to weaponise my existing knowledge for a much more strategic defense. By immersing myself in high-stakes, real-world scenarios, I've moved from theoretical understanding to a state where I can now dissect a threat from the inside out. I no longer just respond to incidents; I possess the tactical foresight to stay ahead of them.**

Program Impact Themes

Analysis of participants' feedback revealed consistent themes that highlight both the quality of the learning experience and its professional impact.

The training was widely described as rigorous, practical, and directly aligned with real-world security challenges. Participants repeatedly highlighted the hands-on labs and scenario-based learning as major strengths, noting that these components deepened their understanding beyond theory and strengthened their ability to apply cybersecurity concepts in operational environments.

As a result, participants reported significant growth in technical depth, gaining specialised knowledge that extends well beyond foundational training. This technical advancement translated into stronger professional confidence, with participants expressing greater ease in discussing complex concepts, contributing in technical settings, and approaching cybersecurity tasks with a more structured mindset.

For many, this was their first exposure to training delivered at this level of global standard. Earning SANS certifications not only validated their expertise but also enhanced their professional credibility and career readiness, positioning them more competitively for advanced technical and leadership opportunities.

The Broader Impact

The impact of CyberGirls+ extends beyond each individual participant. When a woman in cybersecurity earns an advanced certification, the ripple effect is significant.

1. Her organization benefits from stronger security capacity and technical expertise
2. Younger women see visible examples of what is possible, and she becomes a role model for other women in cybersecurity
3. The regional workforce gains diversity in technical leadership
4. The cybersecurity ecosystem becomes more inclusive, skilled, and resilient
5. As certified professionals grow, they also give back, sharing knowledge through mentorship, peer learning, and community engagement.

   CyberGirls+ is not only developing individual talent. It is strengthening representation at the specialist level and contributing to a more balanced and capable cybersecurity workforce.

Looking Ahead

CyberGirls+ illustrates the value of intentional collaboration between global institutions and locally rooted organizations. When expertise, access, and contextual support come together, the results are both meaningful and sustainable.

With continued partnership and investment, this model has the potential to:

- Expand the number of CyberGirls alumni attaining advanced cybersecurity certifications
- Strengthen Africa's presence and competitiveness within the global cybersecurity workforce
- Build a sustained pipeline of technically skilled, confident female cybersecurity professionals prepared for leadership and specialist roles

The progress made so far signals not an endpoint, but the foundation for broader, long-term impact.

Closing Note

The outcomes presented in this report are not isolated achievements. They demonstrate what is possible when access to opportunity is intentional, structured, and supported by strong partnerships.

Through this collaboration, SANS Institute extended more than training. They provided access to globally recognised standards of cybersecurity excellence and professional credibility. CyberSafe Foundation complemented this by building the talent pipeline, support ecosystem, and community framework necessary for participants to thrive.

Together, this partnership has done more than award certifications. It has accelerated career progression, strengthened professional confidence, and contributed to a more capable and diverse cybersecurity workforce, particularly in regions like Africa where talent is abundant but access to advanced opportunities remains limited.

CyberSafe Foundation is proud to partner with SANS Institute to advance pathways that enable women to grow, lead, and contribute meaningfully to the global cybersecurity workforce, and we invite you to join us in expanding this impact.

For partnership or enquiries, please contact

connect@cybersafefoundation.org

Appendix

Image credit: CyberGirls+ participants

https://shecancode.io/why-is-there-a-lack-of-women-in-cyber-security/

https://www.wicys.org/whats-really-causing-the-cybersecurity-gender-gap/

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https://www.womentech.net/how-to/what-challenges-do-women-face-in-cybersecurity-and-how-can-policies-address-them